Global Industry Partner

worldskills

SCE Guide Trainer Packages

Siemens Automation Cooperates with Education (SCE) | 02/2022

Unrestricted | © Siemens 2022 | Version 02/2022

SIEMENS

Siemens Automation Cooperates with Education (SCE)
Teaching made easy

The SCE program offers a system for sustainable educational support which is unique worldwide.

As a technology leader, we support educational and research & development institutions in the field of automation and drive technology with our industrial know-how and specific services on the way to Industry 4.0.

Overview of SCE services

- Learning/training documents for classes and individual study
- Trainer Packages for practice-oriented education
- Courses for conveying up-to-date technical knowledge
- Support for your projects/technical books
- Partnerships with educators, producers of learning systems and WorldSkills
- Information portal for quick access to all SCE offers

SIEMENS

Digitalization is changing our world quickly and dramatically

Digitalization

- Involves a huge number of new possibilities/challenges
- Enables industrial mass production for personalized products
- Requires new employee competencies

Challenges for education and teaching

Keep pace with innovation, e.g. convey Industry 4.0 knowledge and additional skills

Video

Siemens – as the technology leader in automation engineering – supports educators on the way to Industry 4.0 through SCE

Global Industry Partner

worldskills

Unrestricted | © Siemens 2022 | Version 02/2022
Overview I Graphic

SIEMENS

The SCE digitalization concept
Implemented by Vocational School 2 in Wolfsburg, Germany in a group project

***Best practice:** Implementation by BBS 2 Wolfsburg. Not available for purchase!*

1. **Virtual commissioning with the help of the digital twin using Siemens NX-MCD CAD software**
2. **Intuitive TIA Portal engineering of the real automation plant with SIMATIC S7-1500/ET 200SP/RFID/SCALANCE/SINAMICS**
3. **Cloud connection via IOT2050 for evaluation of production data**

SIEMENS

SCE Trainer Packages for educators

SCE Trainer Packages are specially priced hardware and software packages specifically compiled for up-to-date educational content in automation and drive technology.

> 90 Trainer Packages for practice-oriented education

- Innovative hardware/software components incl. complete accessories
- Completely and functionally coordinated with one another in terms of content
- Low-cost original industrial components for classes
- Perfectly coordinated with SCE learning and training documents and aligned with teaching curriculums/content
- Innovative trends taken into account

Why do we provide SCE Trainer Packages?

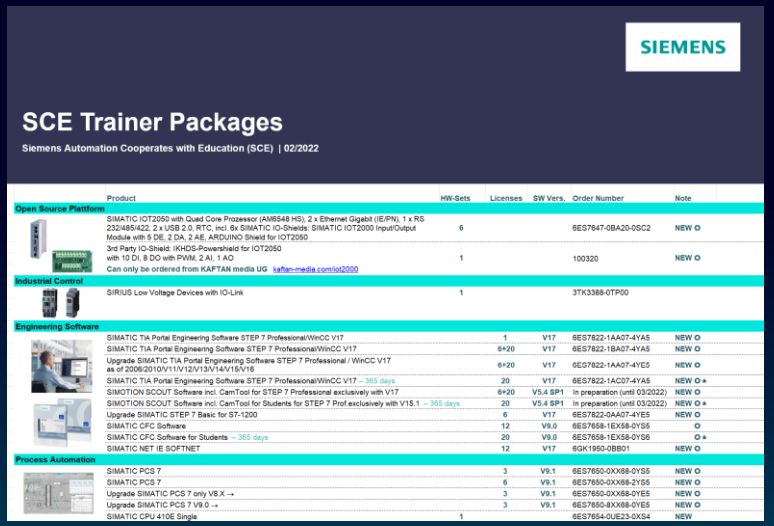
Assembling individual products requires a lot of know-how and is time-consuming. We have therefore mapped the relevant configurations from practical educational use in hardware & software packages for you

Who are these Trainer Packages for?

- For research, development and educational institutions
- For didactic companies (Suppliers of Learning Systems) for integration into their didactic solution
- For industrial and initial corporate training → see order information
- For SinuTrain, there are separate approval/order processes → see order information

What should be considered when using Trainer Packages?

- The products listed may be subject to European/German and/or US export regulations.
- The order information must also be observed


SIEMENS

SCE Trainer Packages

Siemens Automation Cooperates with Education (SCE) | 02/2022

	Product	HW-Sets	Licenses	SW Vers.	Order Number	Note
Open Source Plattform						
	SIMATIC IOT2050 with Quad Core Prozessor (AM6548 HS), 2 x Ethernet Gigabit (IE/PN), 1 x RS 232/485/422, 2 x USB 2.0, RTC, incl. 6x SIMATIC IO-Shields: SIMATIC IOT2000 Input/Output Module with 8 DE, 2 DA, 2 AE, ARDUINO Shield for IOT2050	6			6ES7647-0BA20-0SC2	NEW ⊙
	3rd Party IO-Shield: IKHDS-Powershield for IOT2050 with 10 DI, 8 DO with PWM, 2 AI, 1 AO	1			100320	NEW ⊙
	Can only be ordered from KAFTAN media UG kaftan-media.com/iot2000					
Industrial Control						
	SIRIUS Low Voltage Devices with IO-Link	1			3TK3388-0TP00	
Engineering Software						
	SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		1	V17	6ES7822-1AA07-4YA5	NEW ⊙
	SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		6+20	V17	6ES7822-1BA07-4YA5	NEW ⊙
	Upgrade SIMATIC TIA Portal Engineering Software STEP 7 Professional / WinCC V17 as of 2006/2010/V11/V12/V13/V14/V15/V16		6+20	V17	6ES7822-1AA07-4YE5	NEW ⊙
	SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17 → 365 days		20	V17	6ES7822-1AC07-4YA5	NEW ⊙ +
	SIMOTION SCOUT Software incl. CamTool for STEP 7 Professional exclusively with V17		6+20	V5.4 SP1	In preparation (until 03/2022)	NEW ⊙
	SIMOTION SCOUT Software incl. CamTool for Students for STEP 7 Prof.exclusively with V15.1 → 365 days		20	V5.4 SP1	In preparation (until 03/2022)	NEW ⊙ +
	Upgrade SIMATIC STEP 7 Basic for S7-1200		6	V17	6ES7822-0AA07-4YE5	NEW ⊙
	SIMATIC CFC Software		12	V9.0	6ES7658-1EX58-0YS5	⊙
	SIMATIC CFC Software for Students → 365 days		20	V9.0	6ES7658-1EX58-0YS6	⊙ +
	SIMATIC NET IE SOFTNET		12	V17	6GK1960-0BB01	NEW ⊙
Process Automation						
	SIMATIC PCS 7		3	V9.1	6ES7650-0XX88-0YS5	NEW ⊙
	SIMATIC PCS 7		6	V9.1	6ES7650-0XX88-2YS5	NEW ⊙
	Upgrade SIMATIC PCS 7 only V8.X →		3	V9.1	6ES7650-0XX88-0YE5	NEW ⊙
	Upgrade SIMATIC PCS 7 V9.0 →		3	V9.1	6ES7650-8XX88-0YE5	NEW ⊙
	SIMATIC CPU 410E Single	1			6ES7654-0UE23-0XS4	NEW

↗ SCE Trainer Package list

SIEMENS

Overview of Trainer Packages

SIMATIC TIA engineering and runtime software
- Overview structure STEP 7 and HMI
- SIMATIC TIA Portal Engineering STEP 7 Professional and WinCC software for training/for students *
- SIMOTION SCOUT software incl. CamTool for training/for students *
- SIMATIC CFC software for training/for students
- SIMATIC NET IE Softnet *

Simulation
- SIMIT Simulation Platform *
- SIMIT demo version *

Basic automation
- LOGO! 8 12/24V, LOGO! 8 230V (ETHERNET) *
- S7-1200 Basic Controller 1215C *
- Upgrade STEP 7 Basic for S7-1200 package *
- Basic Panels KTP400 for LOGO!
- Basic Panels KTP700 for S7-1200

SIRIUS industrial controls

Open source platform IOT2050 *

SinuTrain software *

PLM software *

Operator control & monitoring
- MTP700/MTP1500 HMI Unified Comfort Panels *
- TP700/TP1500 Comfort Color Panel
- SCADA system SIMATIC WinCC with options – additionally available as ASIA variant

Process automation
- Process Control System PCS 7 3er license/upgrade *
- Process control system PCS 7 6er license *
- Process control system PCS 7 AS CPU 410E + ET 200SP HA *

Drive technology
- SINAMICS G120 standard drive
- SINAMICS S210 servo drive
- SINAMICS S120 servo drive *

Industrial identification
- SIMATIC code reader MV540 *
- SIMATIC RFID system RF200/RF300/RF600 *

SIMATIC controller
- ET 200SP 1515SP PC2 F Open Controller *
- ET 200SP 1515SP PC2 TF Open Controller *
- ET 200SP 1512SP F-1 PN Distributed Controller
- S7-1516F PN/DP, S7-1516 PN/DP
- S7-1517TF-3 PN/DP *
- Upgrade S7-314C-2PN/DP

Distributed IOs
- ET 200SP digital PROFINET
- ET 200SP with input module — Energy Meter
- ET 200SP with communication module — IO-Link
- ET 200SP with communication module — AS-i Master
- ET 200SP Expansion — Analog — Safety

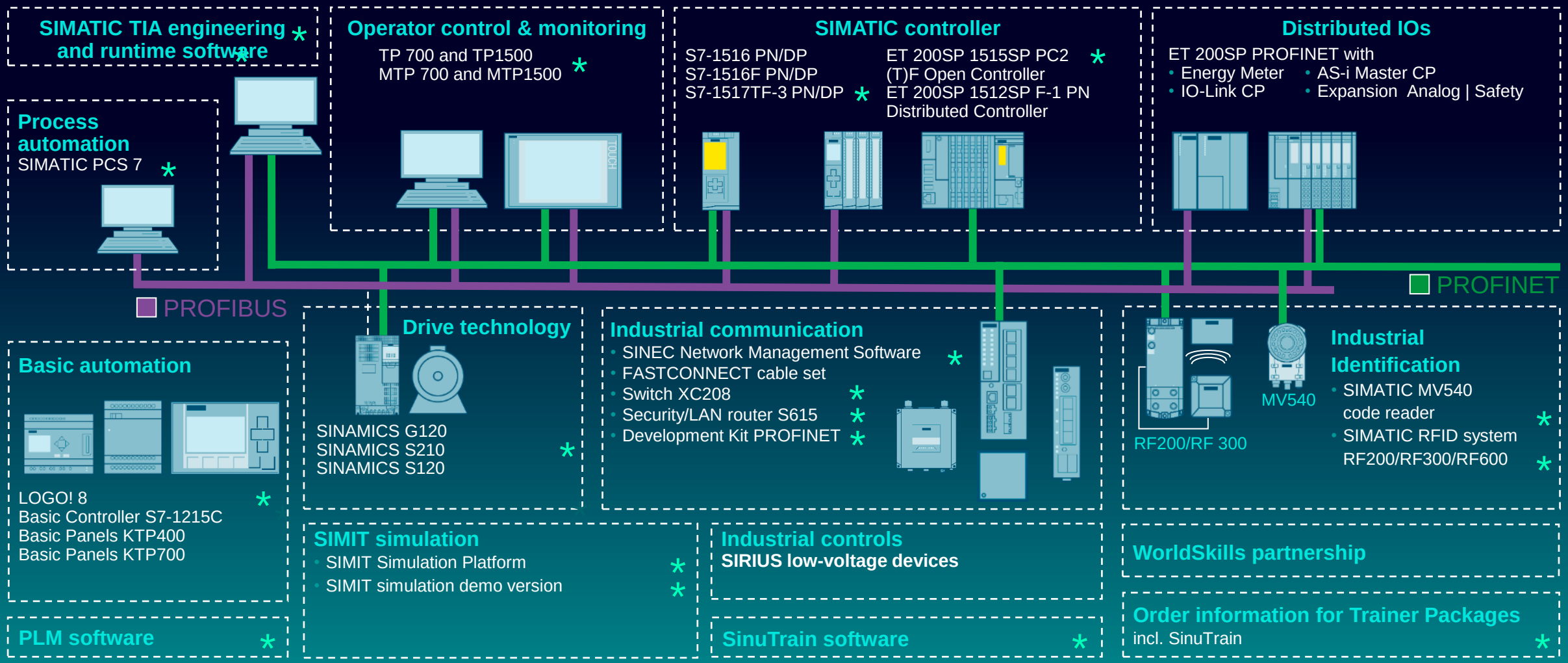
Industrial communication
- SINEC Network Management Software *
- FASTCONNECT cable set
- IE SCALANCE switch XC208
- IE SCALANCE Security/LAN router S615
- Development Kit PROFINET

WorldSkills partnership

Order information for Trainer Packages
incl. SinuTrain *

* New package

System architecture of the Trainer Packages

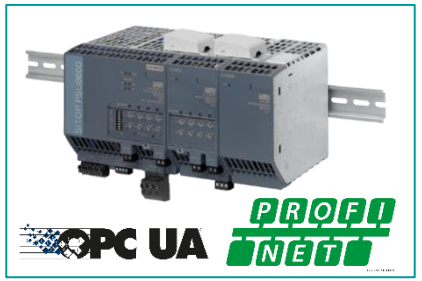


* New package

SITOP Power supply

SITOP overview

Advanced



↗ PSU8600
The power supply with complete TIA integration, open communication up to the cloud

Standard

↗ PSU6200
The all-round power supply for a large number of applications

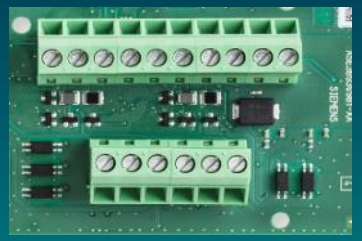
Basic

↗ PSU100L
The low-cost basic power supply

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC IOT2050
Open source platform



Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC IOT2050 with Quad Core Processor (AM6548 HS), 2 x Ethernet Gigabit (IE/PN), 1 x RS 232/485/422, 2 x USB 2.0, RTC, incl. 6x SIMATIC IO Shields: SIMATIC IOT2000 Input/Output Module with 5 DE, 2 DA, 2 AE, ARDUINO Shield for IOT2050	**6**			6ES7647-0BA20-0SC2	**NEW** ○
3rd Party IO Shield: IKHDS-Power Shield for IOT2050 with 10 DI, 8 DO with PWM, 2 AI, 1 AO Can only be ordered from KAFTAN media UG **kaftan-media.com/iot2000**	**1**			100320	**NEW** ○

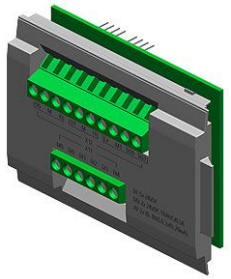
○ Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780 ★ Only for schools, colleges and universities

Information about SIMATIC IOT2000: see siemens.com/iot2000 and siemens.com/sce/iot2000

SIEMENS

SIMATIC IOT2050

6 x SIMATIC IOT2050



6 x SIMATIC IoT2050
Input/Output Modul

Recommended accessories

6XV1870-3RH60
Industrial Ethernet TP XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, pre-assembled with 2 RJ45 connectors, length 6 m

6GK1950-0BB00
Trainer Package FastConnect cable set

6EP3336-7SB00-3AX0
SITOP PSU6200 24 V/20 A stabilized power supply input: 120 - 230 V AC (110 - 240 V DC) output: 24 V DC/20 A with diagnostic interface

A MicroSDHC memory card must be present in addition

6 x	SIMATIC IOT2050; 2x Gb Ethernet RJ45; Display port; 2x USB2.0; 16 GB eMMC; SD card slot; 24 V DC industrial power supply	6ES7647-0BA00-1YA2
6 x	SIMATIC IoT2000 input/output module, 5x DI 2x AI 2x DQ, ARDUINO Shield for SIMATIC IoT2040/IoT2050	6ES7647-0KA01-0AA2

System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6ES7647-0BA20-0SC2

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Industrial controls
Overview

Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIRIUS low-voltage devices with IO-Link		1		3TK3388-0TP00	

SIEMENS

SIRIUS low-voltage devices with IO-Link (1/3)

2 x Circuit breaker
3RV2011-1BA20

2 x Contactor
3RT2015-2BB42-0CC0

3 x Contactor
3RT2015-2BB42

1 x FM IO-Link
3RA2711-2BA002

1 x FM Star-delta
3RA2816-0EW20

1 x Digital monitoring relay
3UG4841-2CA40

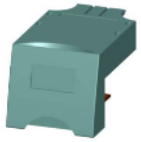
1 x Overload relay
3RB3113-4PE0

1 x Operator panel for devices with IO-link
3RA6935-0A

1 x 3-phase busbar
3RV2917-1A

1 x 3-phase busbar
3RV2917-4B

5 x Contactor base
3RV2917-7AA00



2 x Cable connector
3RV2917-5AA00

2 x Link module
3RA2911-2AA00

1 x Wiring kit
3RA2913-2AA2

1 x Wiring kit
3RA2913-2BB2

IO-Link

Matching: Trainer Package ET 200SP with IO-Link communication module: 6ES7155-6AU00-0AB2

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIRIUS low-voltage devices with IO-Link (2/3)

1 x	3-phase busbar with infeed left, for 2 circuit breakers, size S00 and S0	3RV2917-1A
1 x	3-phase busbar including extension connector for 3 circuit breakers, size S00 and S0	3RV2917-4B
5 x	Contactor base, for contactor size S00 with screw/spring-loaded terminal (single-unit pack)	3RV2917-7AA00
2 x	Cable connector, size S00, spring-loaded terminal	3RV2917-5AA00
2 x	Circuit breaker, size S00, for motor protection, class 10, A-release 1.4..2A, N-release 26A, spring-loaded terminal, standard switching capacity	3RV2011-1BA20
2 x	Link module, electrical and mechanical, for 3RV2011 and 3RT2011, spring-loaded terminal	3RA2911-2AA00
2 x	Contactor, AC-3, 3kW/400V, 1NC, 24 V DC, communication-capable, 3-pin, size S00, spring-loaded terminal	3RT2015-2BB42-0CC0
3 x	Contactor, AC-3 3kW/400V, 1NC, 24 V DC, 3-pin, size S00, spring-loaded terminal	3RT2015-2BB42

Matching: Trainer Package ET 200SP with IO-Link communication module: 6ES7155-6AU00-0AB2

System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	See slides below
Order number:	3TK3388-0TP00

IO-Link

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIRIUS low-voltage devices with IO-Link (3/3)

1 x	Wiring kit, spring-loaded terminal, electrical and mechanical, including mechanical interlock for reversing starters, size S00	3RA2913-2AA2
1 x	Function module for IO-Link, reverse start, spring-loaded terminal, installation on contactors 3RT2 S00/S0, communication-capable contactor required	3RA2711-2BA00
1 x	Wiring kit, spring-loaded terminal, electrical and mechanical, including mechanical interlock, for star-delta starter, size S00	3RA2913-2BB2
1 x	Function module star-delta consisting of basic module and 2 coupling modules with integrated connecting cable, time range 0.5...60 s, 24...240 V AC/DC for contactors 3RT2	3RA2816-0EW20
1 x	Digital monitoring relay cos phi and current monitoring for IO-Link 90 to 690 V AC, 0.2 to 10 A, overshoot and undershoot, on-delay time, tripping delay time, hysteresis 0.1 to 3.0 A, 2 change-over contacts, spring-type connection system	3UG4841-2CA40
1 x	Overload relay 1...4 A for motor protection, size S00, class 5...30, contactor mounting main circuit: sprint-type terminal, auxiliary circuit: spring-type terminal, manual-automatic reset, internal ground fault detection	3RB3113-4PE0
1 x	Operator control block for devices with IO-Link, operator control block for SIRIUS with IO-Link	3RA6935-0A

IO-Link

Matching: Trainer Package ET 200SP with IO-Link communication module: 6ES7155-6AU00-0AB2

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIRIUS industrial controls modular system

SIRIUS Industrial Controls ↗

SIRIUS Command and Signaling Devices ↗

Safety Integrated ↗

Safety Relays 3SK1 ↗

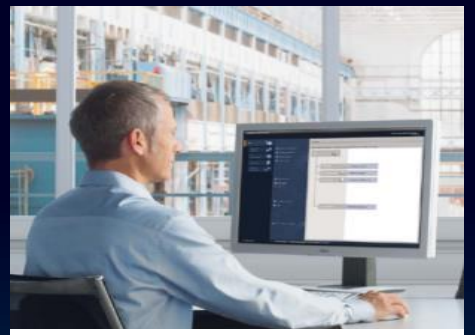
SIRIUS@YouTube ↗

Safety@YouTube ↗

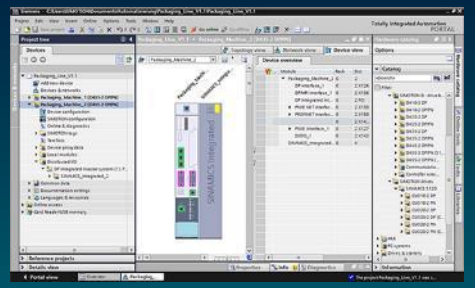
- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Engineering and runtime software
Overview



SW functionally identical to the industrial version



Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		1	V17	6ES7822-1AA07-4YA5	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		6+20	V17	6ES7822-1BA07-4YA5	NEW O
Upgrade SIMATIC TIA Portal Engineering Software STEP 7 Professional / WinCC V17 as of 2006/2010/V11/V12/V13/V14/V15/V16		6+20	V17	6ES7822-1AA07-4YE5	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17 – **365 days**		20	V17	6ES7822-1AC07-4YA5	NEW O★
SIMOTION SCOUT Software incl. CamTool for STEP 7 Professional exclusively with V17		6+20	V5.4 SP1	In preparation (until 03/2022)	NEW O
SIMOTION SCOUT Software incl. CamTool for students for STEP 7 Prof. exclusively with V17 – **365 days**		20	V5.4 SP1	In preparation (until 03/2022)	NEW O★
Upgrade SIMATIC STEP 7 BASIC for S7-1200		6	V17	6ES7822-0AA07-4YE5	NEW O
SIMATIC CFC Software		12	V9.0	6ES7658-1EX58-0YS5	O
SIMATIC CFC Software for students – **365 days**		20	V9.0	6ES7658-1EX58-0YS6	O★
SIMATIC NET IE SOFTNET		12	V17	6GK1950-0BB01	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		1	V17	6ES7822-1AA07-4YA5	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		6+20	V17	6ES7822-1BA07-4YA5	NEW O

O Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780 ★ Only for schools, colleges and universities

SIEMENS

System structure of Trainer Packages STEP 7 and SIMATIC HMI

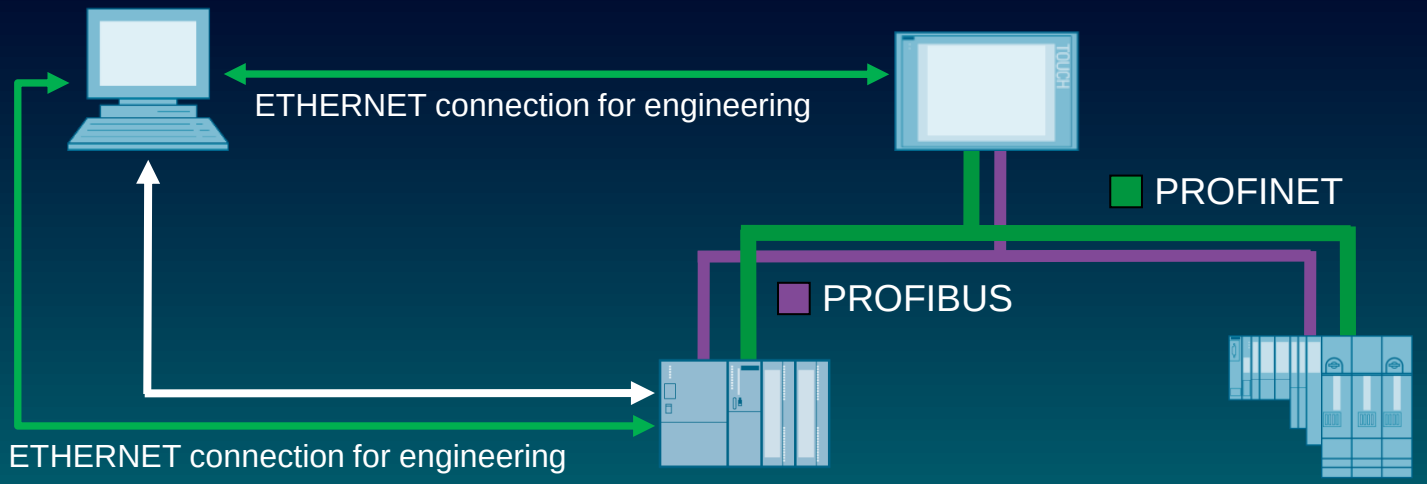
SIMATIC software
- STEP 7 as basis

Engineering tools for STEP 7
- S7-PLCSIM simulation of S7 hardware
- S7-SCL similar to ST according to IEC61131 high-level language
- S7-GRAPH for sequencers according to DIN 1131-3

SIMATIC software HMI – Human Machine Interface

WinCC with
- Advanced level
- Smart Options
- Smart Access
- OPC interface
- …

Touch Panel
TP700 and TP1500
MTP700 and MTP1500
PROFIBUS and PROFINET connection



Software Engineering Tool for STEP 7
- SIMATIC CFC
- SIMATIC NET software
- …

S7 controller
Trainer Package with PROFINET and PROFIBUS

ET 200SP Open Controller. ET 200SP …
Trainer Package with PROFINET
For PROFIBUS, only interface has to be ordered separately

SIEMENS

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

1er license (individual license)

Combo license for changeable use:

- STEP 7 Professional V17
- STEP 7 Professional 2021

Combo license for changeable use:

- Safety Advanced V17
- Distributed Safety V5.4 SP5 Update 2

License for engineering SW:

- CFC V17
- Cloud Connector V1.0
- Network Planner V2.0
- Multiuser V17
- Teamcenter Gateway V17
- Test Suite Advanced V17

License for S7-1500 hardware:

- S7-PLCSIM Advanced V4.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)

License for SINAMICS hardware:

- SINAMICS Startdrive license Basic V17
- SINAMICS Startdrive license Advanced V17
- SINAMICS DCC V17

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

1er license (individual license)

License for SIRIUS hardware:

- SIRIUS ENGINEERING SAFETY ES Professional
- SIRIUS SIMOCODE ES Professional COMBO
- SIRIUS Soft Starter ES PREMIUM COMBO

License for S7-300 hardware:

- S7-Technology V4.2
- S7 PID Professional V17

Combo license for changeable use:

- SIMATIC WinCC Unified V17
- SIMATIC WinCC Advanced V17
- SIMATIC WinCC flexible 2008 SP5
- Energy Suite Engineering V17
- Visualization Architect (SiVArc) V17

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

Option and runtime software 1er license (individual license)

WinCC Advanced V17:

- WinCC RT Advanced (512 PowerTags)
- WinCC Recipes for RT Advanced
- WinCC Logging for RT Advanced
- WinCC Sm@rtServer for RT Advanced
  WinCC Sm@rtServer for SIMATIC Comfort/Mobile Panels
  WinCC Sm@rtServer for SIMATIC Basic Panels
- ProDiag for WinCC RT Advanced
- ProDiag for SIMATIC Comfort/Mobile Panels

WinCC flexible 2008 SP5:

- WinCC flexible Runtime (128 PowerTags)
- WinCC flexible/Sm@rtAccess for Panels
- WinCC flexible/Sm@rtAccess for PC
- WinCC flexible/Sm@rtService for Panels
- WinCC flexible/Sm@rtService for PC
- WinCC flexible/OPC Server for PC
- WinCC flexible/Archives for PC
- WinCC flexible/Recipes for PC

WinCC Unified V17:

- WinCC Unified PC (1k) RT
- WinCC Unified Parameter Control (Unified PC)
- WinCC Unified Client Operate (10)
- WinCC Unified V17 Collaboration
- WinCC Unified Logging Tags (1000)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

1er license (individual license)

Packaging 1 x DVD per package:

- STEP 7 Prof/Safety/WinCC Adv/WinCC Unified V17
- CFC V17
- TIA Portal Test Suite Advanced V17
- S7-PLCSIM Advanced V4.0
- S7-PLCSIM V17
- WinCC Images V17
- WinCC Unified PC Runtime V17
- WinCC Runtime Advanced V17
- Energy Suite V17
- Visualization Architect (SiVArc) V17
- Siemens Network Planner V2.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)
- SINAMICS Startdrive V17
- SINAMICS DCC V17
- STEP 7 Professional 2021
- Distributed Safety V5.4 Update 2

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

All other DVDs can be downloaded

support.industry.siemens.com/cs/de/en/ps/13613/dl

System requirements:	WIN10 (64-bit) Prof. und Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick (1 stick)
Order number:	6ES7822-1AA07-4YA5

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

6er classroom license

Combo license for changeable use:

- STEP 7 Professional V17
- STEP 7 Professional 2021

Combo license for changeable use:

- Safety Advanced V17
- Distributed Safety V5.4 SP5 Update 2

License for Engineering SW:

- CFC V17
- Cloud Connector V1.0
- Network Planner V2.0
- Multiuser V17
- Teamcenter Gateway V17
- Test Suite Advanced V17

License for S7-1500 hardware:

- S7-PLCSIM Advanced V4.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)

License for SINAMICS hardware:

- SINAMICS Startdrive license Basic V17
- SINAMICS Startdrive license Advanced V17
- SINAMICS DCC V17

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

6er classroom license

License for SIRIUS hardware:

- SIRIUS ENGINEERING SAFETY ES Professional
- SIRIUS SIMOCODE ES Professional COMBO
- SIRIUS Soft Starter ES PREMIUM COMBO

License for S7-300 hardware:

- S7-Technology V4.2
- S7 PID Professional V17

Combo license for changeable use:

- SIMATIC WinCC Unified V17
- SIMATIC WinCC Advanced V17
- SIMATIC WinCC flexible 2008 SP5
- Energy Suite Engineering V17
- Visualization Architect (SiVArc) V17

1 x SCE Trainer Package: SIMATIC STEP 7 / WinCC V17 software **for students** 6ES7822-1AC07-4YA5
Software subject to time limit of 365 days with authorization

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

Option and runtime software 6er classroom license

WinCC Advanced V17:

- WinCC RT Advanced (512 PowerTags)
- WinCC Recipes for RT Advanced
- WinCC Logging for RT Advanced
- WinCC Sm@rtServer for RT Advanced
  WinCC Sm@rtServer for SIMATIC Comfort/Mobile Panels
  WinCC Sm@rtServer for SIMATIC Basic Panels
- ProDiag for WinCC RT Advanced
- ProDiag for SIMATIC Comfort/Mobile Panels

WinCC flexible 2008 SP5:

- WinCC flexible Runtime (128 PowerTags)
- WinCC flexible/Sm@rtAccess for Panels
- WinCC flexible/Sm@rtAccess for PC
- WinCC flexible/Sm@rtService for Panels
- WinCC flexible/Sm@rtService for PC
- WinCC flexible/OPC Server for PC
- WinCC flexible/Archives for PC
- WinCC flexible/Recipes for PC

WinCC Unified V17:

- WinCC Unified PC (1k) RT
- WinCC Unified Parameter Control (Unified PC)
- WinCC Unified Client Operate (10)
- WinCC Unified V17 Collaboration
- WinCC Unified Logging Tags (1000)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training

6er classroom license

Packaging 1 x DVD per package:

- STEP 7 Prof/Safety/WinCC Adv./WinCC Unified V17
- CFC V17
- TIA Portal Test Suite Advanced V17
- S7-PLCSIM Advanced V4.0
- S7-PLCSIM V17
- WinCC Images V17
- WinCC Unified PC Runtime V17
- WinCC Runtime Advanced V17
- Energy Suite V17
- Visualization Architect (SiVArc) V17
- Siemens Network Planner V2.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)
- SINAMICS Startdrive V17
- SINAMICS DCC V17
- STEP 7 Professional 2021
- Distributed Safety V5.4 Update 2

All other DVDs can be downloaded

- support.industry.siemens.com/cs/de/en/ps/13613/dl

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

1 x SCE Trainer Package: SIMATIC STEP 7 / WinCC V17 software **for students** 6ES7822-1AC07-4YA5

Software subject to time limit of 365 days with authorization

System requirements:	WIN10 (64-bit) Prof. und Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC	
Sales note:	Schools, colleges and universities, for in-house vocational training departments	
Technical note:	Authorization on USB stick (1 stick + 1 stick with 20 software for students)	
Order number:	6ES7822-1BA07-4YA5	Upgrade from 2006/2010/V11/V12/V13/V14/V15/V16 → V17/2021 6ES7822-1AA07-4YE5

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 and WinCC V17 software for students
Individual licenses – limited to 365 days with 20er licenses

Combo license for changeable use:
- STEP 7 Professional V17
- STEP 7 Professional 2021

Combo license for changeable use:
- Safety Advanced V17
- Distributed Safety V5.4 SP5 Update 2

- **License for Engineering SW:**
- CFC V17
- Multiuser V17
- Test Suite Advanced V17

License for S7-1500 hardware:
- S7-PLCSIM Advanced V4.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)

Option and Runtime software:
- WinCC Unified PC (1k) RT
- WinCC RT Advanced (512 PowerTags)
- WinCC flexible Runtime (128 PowerTags)

Software subject to time limit of 365 days with authorization

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TIA Portal STEP 7 and WinCC V17 software for students
Individual licenses – limited to 365 days with 20er licenses

Packaging 1 x DVD per package:

- STEP 7 Prof/Safety/WinCC Adv/WinCC Unified V17
- CFC V17
- TIA Portal Test Suite Advanced V17
- S7-PLCSIM Advanced V4.0
- WinCC Unified PC Runtime V17
- WinCC Runtime Advanced V17
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)
- SINAMICS Startdrive V17
- STEP 7 Professional 2021
- Distributed Safety V5.4 Update 2

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

All other DVDs can be downloaded

support.industry.siemens.com/cs/de/en/ps/13613/dl

System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Use only for students for independent study at home. Schools, colleges and universities, not for in-house vocational training departments
Technical note:	Authorization on USB stick (1 stick)
Order number:	6ES7822-1AC07-4YA5

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMOTION SCOUT V5.4 SP1 incl. CamTool V4.2 –
Software for training – 6er classroom license

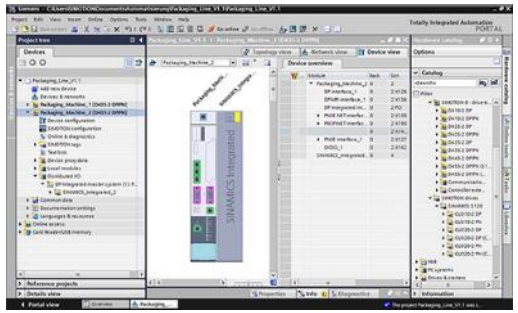
6 x License for SIMOTION SCOUT V5.4 SP1
6 x License for CamTool V4.2
6 x License for DCC SIMOTION V3.2 SP1

1x Package for 20 students (6AU1810-1BE5_-1YA5)

1 x 20 licenses for SIMOTION SCOUT V5.4 SP1 – **for students**
1 x 20 licenses for CamTool V4.2 – **for students**
1 x 20 licenses for DCC SIMOTION V3.2 SP1 – **for students**
Software subject to time limit of 365 days with authorization

Content: Software and documentation on a DVD

Please note: Only for STEP 7 Professional V17



System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick (1 stick)
Order number:	6AU1810-1BC5_-1YA5 in preparation

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMOTION SCOUT V5.4 SP1 incl. CamTool V4.2 – for students
limited to 365 days

1x Package for 20 students

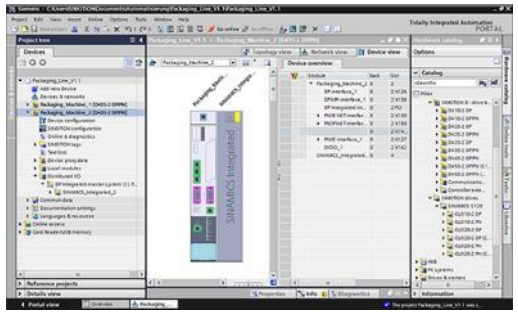
1 x 20 licenses for SIMOTION SCOUT V5.4 SP1 – **for students**

1 x 20 licenses for CamTool V4.2 – **for students**

1 x 20 licenses for DCC SIMOTION V3.2 SP1 – **for students**

Software subject to time limit of 365 days with authorization

Content: Software and documentation on a DVD



Please note: Only for STEP 7 Professional V17

System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Use only for students for independent study at home. Schools, colleges and universities, not for in-house vocational training departments
Technical note:	Authorization on USB stick (1 stick)
Order number:	6AU1810-1BE5_-1YA5 in preparation

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

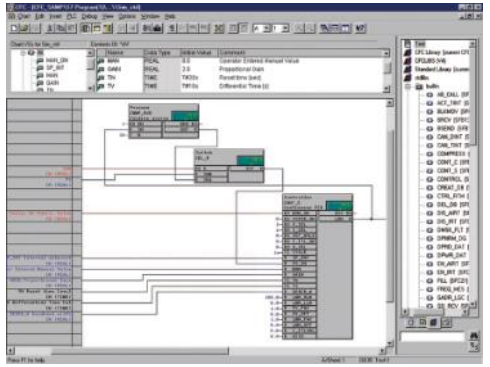
SIEMENS

SIMATIC CFC software
12er classroom license

12 x **SIMATIC CFC V9.0**

3 x 20 **Software for students SIMATIC CFC V9.0**

SW limited to 365 days through authorization
20 licenses per USB stick.



System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick (1 stick)
Order number:	6ES7658-1EX58-0YS5

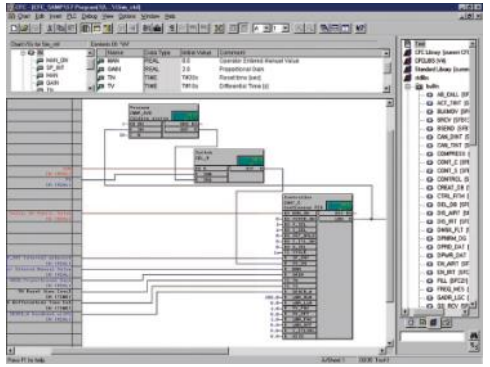
- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC CFC software for students
Single-user licenses – limited to 365 days

20 x **SIMATIC CFC V9.0 for students**

SW limited to 365 days through authorization
20 licenses per USB stick



System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Use only for students for independent study at home. Schools, colleges and universities, not for in-house vocational training departments
Technical note:	Authorization on USB stick (1 stick)
Order number:	6ES7658-1EX58-0YS6

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC NET IE SOFTNET
12er classroom license

12 x SIMATIC NET IE SOFTNET-S7 V17

6GK1704-1CW17-0AA0

SOFTNET-IE S7 V17 software for S7, S5-compatible communication, OPC; PG/OP communication, configuration software, up to 64 connections; floating license; runtime software, software and electronic manual; on DVD; license key on USB flash drive; class A; 2 languages (en, de); for Windows® 10 Pro/Enterprise (64-bit) version 1909, 2004, 20H2; Windows® Server 2016 (standard edition, Datacenter); Windows® Server 2019 (standard edition, Enterprise) Windows® 10(IoT) Enterprise 2016 LTSB Windows® 10(IoT) Enterprise 2019 LTSC

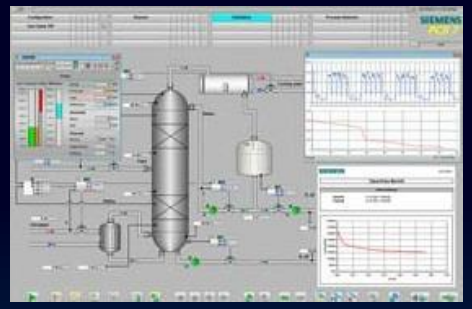
Totally Integrated Automation **PORTAL**

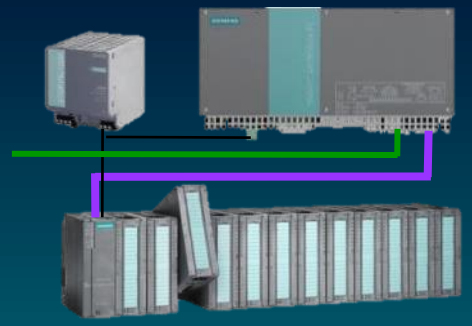
Check HW compatibility for TIA Portal ↗

System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick (1 stick)
Order number:	6GK1950-0BB01

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

Process automation
Overview





Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC PCS 7		3	V9.1	6ES7650-0XX68-0YS5	NEW ○
SIMATIC PCS 7		6	V9.1	6ES7650-0XX68-2YS5	NEW ○
Upgrade SIMATIC PCS 7 only V8.X →		3	V9.1	6ES7650-0XX68-0YE5	NEW ○
Upgrade SIMATIC PCS 7 V9.0 →		3	V9.1	6ES7650-8XX68-0YE5	NEW ○
SIMATIC CPU 410E Single	1			6ES7654-0UE23-0XS4	NEW
SITOP PSU6200 24V/20A, stabilized power supply				6EP3336-7SB00-3AX0	NEW
SIMATIC ET 200SP HA	1			6ES7654-0UE23-0XS3	NEW

○ Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780

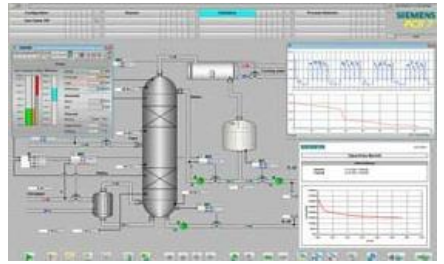
Process control system SIMATIC PCS 7
Software licenses

3er license / 3er upgrade:

1 x DVD: PCS 7 software V9.1

1 x Paper: Certificate of License (A5E00276662)

1 x Stick: License key USB stick with 3 * floating licenses



6er license:

2 x SIMATIC PCS 7 – 3er license

System requirements:	Microsoft Windows 10 (64-bit) Enterprise LTSC 2019 Microsoft Windows Server 2019 (64-bit) Standard / Datacenter			
Sales note:	Schools, colleges and universities, for in-house vocational training departments			
Technical note:	Authorization on USB stick			
Order number:	**3er license** 6ES7650-0XX68-0YS5	**6er license** 6ES7650-0XX68-2YS5	**3er upgrade** only V8.x t 9.1 6ES7650-0XX68-0YE5	**3er upgrade** from V9.0 to V9.1 6ES7650-8XX68-0YE5

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Process Control System SIMATIC PCS 7 Hardware

Packaging:

- 1 x SIMATIC PCS 7 AS SIMATIC CPU 410E Single …
- 1 x SIMATIC ET 200SP HA – Station with IO modules...
- Details: See following slides

Note:

- PCS 7 software licenses must be purchased separately, see previous slide
- SITOP power supply 20A and SIMATIC NET Industrial ETHERNET TP XP Cord RJ45/RJ45 must be purchased separately
- 2 x 6XV1870-3RH60 Industrial ETHERNET TP XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, assembled with 2 RJ45 plugs, length 6 m
- 1 x 6EP3336-7SB00-3AX0 SITOP PSU6200 24 V/20 A stabilized power supply input: 120 … 230 V AC (110 … 240 V DC) Output: 24 V DC/20 A with diagnostics interface

NOTE: The PCS 7 AS Hardware Trainer Package consists of two sub-packages. These must be ordered together. Separation is necessary for logistical reasons.

System requirements:	Microsoft Windows 10 (64-bit) Enterprise LTSC 2019 Microsoft Windows Server 2019 (64-bit) Standard / Datacenter
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	See above
Order number:	6ES7654-0UE23-0XS4 + 6ES7654-0UE23-0XS3

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC PCS 7 AS CPU 410E Single (PROFINET) 6ES7654-0UE23-0XS4
can only be ordered in combination with SIMATIC ET 200SP HA (PROFINET) 6ES7654-0UE23-0XS3

→ See next slide

1 x	SIMATIC PCS 7, CPU 410E Process Automation, central processing unit for S7-400 and S7-400H/F/FH, 5 interfaces: 2x PN, 1x DP, 2x for sync modules for using as spare part, without System Expansion Card	6ES7410-5HM08-0AB0
1 x	SIMATIC PCS 7 System Expansion Card up to 200 process objects only for PCS 7 CPU 410E	6ES7653-2CB00-0XB0
1 x	SIMATIC PCS 7, CR3 XTR S7-400 rack central with 4 slots for extended temperature range and with conformal coating	6ES7401-1DA01-0AA1
1 x	SIMATIC PCS 7, PS 405 4A XTR S7-400 power supply wide range, 24/48/60 V DC; 5 V DC/4 A, for extended temperature range and with conformal coating	6ES7405-0DA02-0AA1
1 x	SIMATIC PCS 7, software, Runtime license AS (PO 100), floating license for 1 user R-SW, without SW, without documentation, License key on USB stick, Class A, Reference HW: PCS 7 IPC bundle, PCS 7 Box bundle	6ES7653-2BA00-0XB5
1 x	SIMATIC S7, software, F-systems, Runtime license license; copy license for 2 installations per AS; Reference HW: SIMATIC S7-400F/FH, Content: 2 certificates + 2 stickers	6ES7833-1CC00-6YX0
1 x	SIMATIC S7-400, backup battery 3.6 V/2.3 AH for PS 405 4 A/10 A/20 A and PS 407 4 A/10 A/20 A for extended temperature range	6ES7971-0BA02

NOTE: The SIMATIC PCS 7 AS CPU 410E Single (PROFINET) must be ordered in combination with the package SIMATIC ET 200SP HA (PROFINET). See next slide.

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC ET 200SP HA (PROFINET) 6ES7654-0UE23-0XS3 for RTX Box (PROFINET)

only in combination with SIMATIC PCS 7 AS CPU 410E Single (PROFINET) 6ES7654-0UE23-0XS4

→ See previous slide

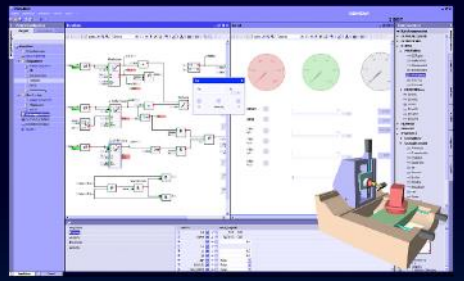
1 x	SIMATIC ET 200SP HA, carrier module in single carrier for holding one interface module of the ET 200SP HA incl. server module	6DL1193-6BH00-0SM0
1 x	SIMATIC ET 200SP HA, BusAdapter BA 2xRJ45, 2 RJ45 sockets for PROFINET	6DL1193-6AR00-0AA0
2 x	SIMATIC ET 200SP HA, carrier module 8-fold carrier for holding 8 I/O modules of the ET 200SP HA	6DL1193-6GC00-0NN0
4 x	SIMATIC ET 200SP HA, digital input module, DI 16X24VDC HA, suitable for terminal block H1, M1, color code CC01, channel diagnostics	6DL1131-6BH00-0PH1
2 x	SIMATIC ET 200SP HA, digital input module, DI 32X24VDC HA, suitable for terminal block, H1, P0, color code CC00, channel diagnostics	6DL1131-6BL00-0PH1
2 x	SIMATIC ET 200SP HA, digital output module, DQ 16X24VDC/0,5A HA, suitable for terminal block, H1, M1, color code CC02, channel diagnostics	6DL1132-6BH00-0PH1
1 x	SIMATIC ET 200SP HA, digital output module, DQ 32X24VDC/0.5A HA, suitable for terminal block, H1, N0, color code CC00, channel diagnostics	6DL1132-6BL00-0PH1
1 x	SIMATIC ET 200SP HA, analog HART input module, AI 16XI 2-wire HART HA, suitable for terminal block H1, M1, color code CC01, channel diagnostics, 16-bit, +/-0.1%,	6DL1134-6TH00-0PH1
1 x	SIMATIC ET 200SP HA, configurable I/O module, AI-DI16/DQ16X24VDC HART, suitable for terminal block H1, M1, color code CC00, channel diagnostics, 16-bit, +/-0.1%,	6DL1133-6EW00-0PH1
1 x	SIMATIC ET 200SP HA, analog input module, AI 16XTC/8XRTD 2-/3-/4-wire HA, suitable for terminal block H1, M1, color code CC00, channel diagnostics, 16-bit, +/-0.05%, 2-/3-/4-wire	6DL1134-6JH00-0PH1
1 x	SIMATIC ET 200SP HA, analog output module, AQ 8XI HART HA suitable for terminal block H1, M1, color code CC00, channel diagnostics, 16-bit, +/-0.1%	6DL1135-6TF00-0PH1
1 x	SIMATIC ET 200SP HA, terminal block, type H1, 32 push-in terminals, internal reference temperature. New load group, width: 22.5 mm	6DL1193-6TP00-0DH1
7 x	SIMATIC ET 200SP HA, terminal block, type H1, 32 push-in terminals, internal reference temperature. Width: 22.5 mm	6DL1193-6TP00-0BH1
1 x	SIMATIC ET 200SP HA, terminal block, type M1, 32 push-in terminals, internal reference temperature. Width: 45 mm	6DL1193-6TP00-0BM
1 x	SIMATIC ET 200SP HA, terminal block, type P0, 64 push-in terminals, width: 45 mm	6DL1193-6TP00-0DP0
1 x	SIMATIC ET 200SP HA, terminal block, type P0, 64 push-in terminals, width: 45 mm	6DL1193-6TP00-0BP0
1 x	SIMATIC ET 200SP HA, terminal block, type N0, 64 push-in terminals, width: 45 mm	6DL1193-6TP00-0DN0

NOTE: The Trainer Package SIMATIC ET 200SP HA (PROFINET) must be ordered in combination with SIMATIC PCS 7 AS CPU 410E Single (PROFINET). See previous slide.

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Virtual commissioning with SIMIT Simulation Platform
Overview

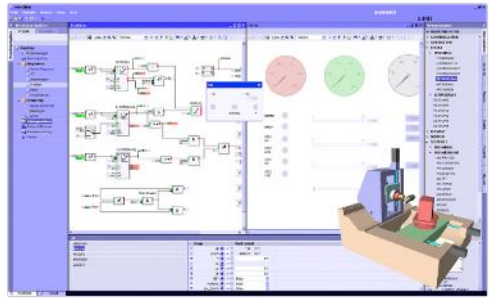


Product		HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMIT simulation software: License USB dongle & carrier USB must be ordered additionally (includes SIMIT S & CTE, FLOWNET, CONTEC libraries) – 4000 simulation tags			1	V10.3	6DL8913-0AK30-0AS5	NEW
SIMATIC license USB dongle (must be ordered with every SIMIT package)		1			6DL8900-8XX00-0XB8-Z Y01 {Y01:0000-0000-0000}	NEW
SIMATIC license carrier USB stick (must be ordered with every SIMIT package)		1			6DL8900-7XX00-0XB8-Z Y01+Y02 {Y01:0000-0000-0000} {Y02:0-0000000}	NEW
SIMIT Simulation Platform, software media package			1	V10.3	6DL8913-0XK30-0XT8	NEW
Demo version SIMIT Simulation Platform, Software Media Package	SIMIT WBT		1	V10.3	Download	NEW

SIMIT Simulation Platform – full version V10.3 with dongle
(valid for the next 3 versions)

- SIMIT 10.3 Trainer Package has the range of functions of SIMIT Model S
- SIMIT 10.3 cannot be installed “side by side” with older SIMIT versions
- SIMIT 10.3 has a new licensing procedure (with new dongle)

- The limitations in demo mode of SIMIT Runtime V10.x demo mode are the same as for SIMIT Runtime V8.x and V9.x



Full version with one dongle (dongle owner = single license)

1. Creating/changing/testing/upgrading of virtual plant models with full range of functions of SIMIT Version SMALL: with max. 4000 simulation tags and CTE and FLOWNET as well as CONTEC libraries
2. The following IO quantity restrictions apply to SIMIT models that are to be used in the demo version (without dongle): 30 bytes each for the input and output area (coupling area), independent of the absolute address. A byte is considered “occupied” when at least one bit of the byte has been used. Max. 4000 simulation tags are usable.

Coupling with S7-1200 not possible

System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC		
Sales note:	Schools, colleges and universities, for in-house vocational training departments		
Technical note:	Hardware USB dongle		
Order number:	6DL8913-0AK30-0AS5	6DL8900-8XX00-0XB8-Z Y01 {Y01:0000-0000-0000} *	6DL8900-7XX00-0XB8-Z Y01+Y02 Y01+Y02 {Y01:0000-0000-0000} {Y02:0-0000000} *

* Must be ordered with each SIMATIC package

SIEMENS

Demo version:
SIMIT Simulation Platform – Full version V10.3 without dongle

SIMIT V10.3 demo version

- The demo version is based on SIMIT S and can be used with max. 4000 simulation tags

The following restrictions apply for this demo version:

- The simulation will only run for 45 minutes and then has to be restarted
- Only one coupling can be added to the project
- The address space is limited to 30 bytes each for the input and output area (coupling area), independent of the absolute address.
  A byte is considered “occupied” when at least one bit of the byte has been used
- The FLOWNET and CONTEC libraries are not supported
- The editor for dynamic graphics, the component type editor (CTE), the trend and message function, the macro component editor, the SMD Typical import and the interface for automatic control are available for test purposes in demo mode
- Projects created in demo mode cannot be executed in regular mode and are limited to the SIMIT installation in which they were created

↗ Discover SIMIT SIMIT Simulation Media Systems (incl. Videos) → Download for Offline Usage

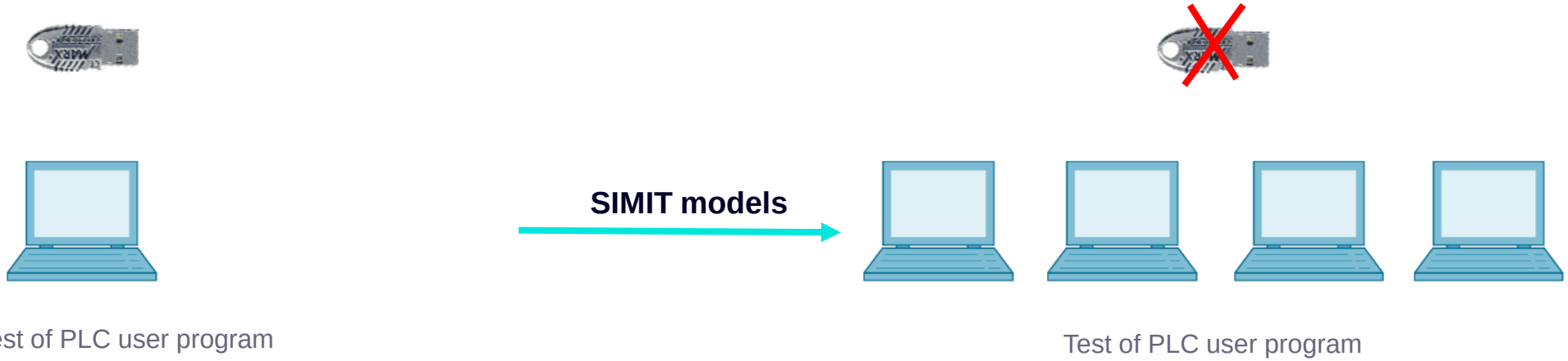
Coupling with S7-1200 not possible

System requirements:	WIN10 (64-bit) Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	Download

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMIT Simulation Platform V10.3
Application versions



Educator (dongle owner):

- Creation, adaptation and transfer of models without restrictions
- Creation, adaptation and transfer of models for demo version within restrictions of demo version

Students (demo version without dongle):

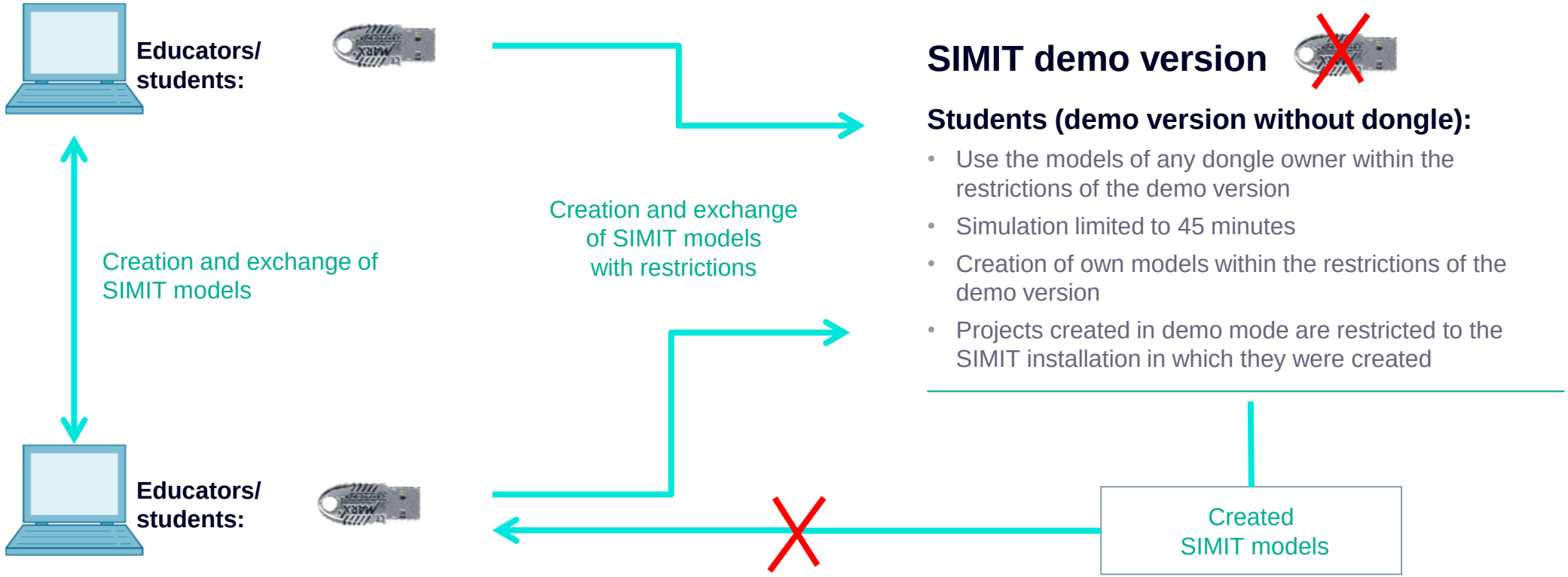
- Use of the models within the restrictions of the demo version
- Creation of own models with address space restriction
- Projects created in the demo version are restricted to the SIMIT installation in which they were created

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMIT Simulation Platform V10.3
Application versions

SIMIT V10.3 with SIMIT dongle A



SIMIT V10.3 with SIMIT dongle B

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Basic automation
Overview

Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
LOGO! 8 12/24V ETHERNET with digital modules DM8 12/24R	6	6		6ED1057-3SA20-0YA1	NEW
LOGO! 8 230V ETHERNET with digital modules DM8 230R	6	6		6ED1057-3SA20-0YB1	NEW
LOGO! 8 12/24V ETHERNET without digital modules DM8 12/24R	9	9		6ED1057-3SA30-0YA1	NEW
Basic Controller SIMATIC S7-1200, CPU 1215C; DC/DC/DC	6	6	V17	6ES7215-1AG40-4AB1	NEW
Basic Controller SIMATIC S7-1200, CPU 1215C; AC/DC/RELAY	6	6	V17	6ES7215-1BG40-4AB1	NEW
Basic Controller SIMATIC S7-1200, CPU 1215C; DC/DC/RELAY	6	6	V17	6ES7215-1HG40-4AB1	NEW
Upgrade SIMATIC STEP 7 BASIC for S7-1200		6	V17	6ES7822-0AA07-4YE5	NEW
SIMATIC KTP400 Basic Color Panel for LOGO! 7/8	1	1	V17	6AV2123-2DB03-0AA1	NEW
SIMATIC KTP400 Basic Color Panel for LOGO! 7/8	6	6	V17	6AV2123-2DB03-0AA0	NEW
SIMATIC KTP700 Basic Color Panel for S7-1200	1			6AV2123-2GB03-0AA1	
SIMATIC KTP700 Basic Color Panel for S7-1200	6			6AV2123-2GB03-0AA0	

Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780

SIEMENS

LOGO! 8 12/24V or 230V
with ETHERNET interface and digital modules DM8

LOGO! 12/24V

6x LOGO! 12/24 RCE	6ED1052-1MD08-0BA1
6x LOGO! DM8 12/24R expansion module	6ED1055-1MB00-0BA2
6x LOGO! Soft Comfort V8	6ED1058-0BA08-0YA1

LOGO! 230V

6x LOGO! 230 RCE	6ED1052-1FB08-0BA1
6x LOGO! DM8 230R expansion module	6ED1055-1FB00-0BA2
6x LOGO! Soft Comfort V8	6ED1058-0BA08-0YA1

Perfectly tailored to the current examinations for:

- Electronics Technician for Building and Infrastructure Systems (EGI) Occupation No. 3160
  An additional Micro SDHC memory card must be available for the examinations

Recommended accessories

6AV2123-2DB03-0AA1; 6AV2123-2DB03-0AA0
Trainer Package: SIMATIC Basic Panel KTP400

6XV1870-3RH60
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6GK1950-0BB00
Trainer Package: FastConnect cable set

6EP3333-6SB00-0AY0
LOGO!Power 24 V / 4 A stabilized power supply
input: 100-240 V AC output: 24 V DC / 4 A

System requirements:	Windows XP, 7, 8, 10 (32- and 64-bit), Mac OSx 10.7 Lion up to and including Mac OSx El Capitan, Linux SUSE 11.3, SP3, K 3.0.76
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	ETHERNET cable required
Order number:	12/24V : 6ED1057-3SA20-0YA1 230V: 6ED1057-3SA20-0YB1

Core product for vocational World Cup Electrical Installations

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

LOGO! 8 12/24V
with ETHERNET interface without digital modules DM8

LOGO! 9 set

9x LOGO! 12/24 RCE	6ED1052-1MD08-0BA1
9x LOGO! Soft Comfort V8	6ED1058-0BA08-0YA1

Recommended accessories

6AV2123-2DB03-0AA1; 6AV2123-2DB03-0AA0
Trainer Package: SIMATIC Basic Panel KTP400

6XV1870-3RH60
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6GK1950-0BB00
Trainer Package: FastConnect cable set

6EP3333-6SB00-0AY0
LOGO!Power 24 V / 4 A stabilized power supply input: 100-240 V AC output: 24 V DC / 4 A

System requirements:	Windows XP, 7, 8, 10 (32- and 64-bit), Mac OSx 10.7 Lion up to and including Mac OSx El Capitan, Linux SUSE 11.3, SP3, K 3.0.76
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	ETHERNET cable required
Order number:	6ED1057-3SA30-0YA1

SIEMENS

Basic Controller SIMATIC S7-1200, CPU 1215C
DC/DC/DC, AC/DC/RELAY, DC/DC/RELAY

Orders before 09/2021 contain SW Status V16

Package contains 6 of each:

Compact CPU S7-1215C
Type depends on package

ETHERNET cable

STEP 7 Basic V17

Recommended accessories

6EP1332-1SH71

SIMATIC S7-1200 Power Module PM1207, stabilized power supply input: 120/230 V AC, output: DC 24 V/2.5 A

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC		
Sales note:	Schools, colleges and universities, for in-house vocational training departments		
Technical note:	Authorization on USB stick		
Order number:	**DC/DC/DC Package** 6ES7215-1AG40-4AB1	**AC/DC/RELAIS Package** 6ES7215-1BG40-4AB1	**DC/DC/RELAIS Package** 6ES7215-1HG40-4AB1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Basic Controller SIMATIC S7-1200, CPU 1215C
DC/DC/DC, AC/DC/RELAY, DC/DC/RELAY

Orders before 09/2021 contain SW Status V16

6 x	**Alternative 1: → DC/DC/DC Package:** SIMATIC S7-1200, CPU 1215C, compact CPU, DC/DC/DC, 2 PROFINET ports, onboard IO: 14 DI 24 V DC; 10 DQ 24 V DC; 0.5A; 2 AI 0-10 V DC, 2 AQ 0-20 mA DC, Power supply: 20.4-28.8 V DC, program/data memory 125 KB	6ES7215-1AG40-0XB0
6 x	**Alternative 2: → AC/DC/RELAY Package:** SIMATIC S7-1200, CPU 1215C, compact CPU, AC/DC/Relay, 2 PROFINET ports, Onboard IO: 14 DI 24 V DC; 10 DQ Relay 2A, 2 AI 0-10V DC, 2 AQ 0-20mA DC, Power supply: 85-264V AC at 47-63 Hz, program/data storage 125 KB	6ES7215-1BG40-0XB0
6 x	**Alternative 3: → DC/DC/RELAY Package** SIMATIC S7-1200, CPU 1215C, compact CPU, DC/DC/Relay, 2 PROFINET ports, Onboard IO: 14 DI 24 V DC; 10 DQ Relay 2A, 2 AI 0-10V DC, 2 AQ 0-20mA DC, Power supply: 20.4-28.8 V DC, program/data memory 125 KB	6ES7215-1HG40-0XB0

---

6 x	SIMATIC STEP 7 Basic V17; floating license; engineering software in TIA Portal; software and documentation on DVD; license key on USB flash drive; class A; 9 languages: en, de, zh included, fr, es, it, ru, jp, kr as download; executable in Windows 10, Windows Server 2016/2019; for configuration of SIMATIC S7-1200 SIMATIC Basic Panels	6ES7822-0AA07-0YA5
6 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60

Upgrade SIMATIC STEP 7 Basic for S7-1200 V17
Software for training

6 x STEP 7 Basic V17 Upgrade Version V10.5 /V11/V12/V13/14/15/15.1/16 to V17

SIMATIC STEP 7 Basic V17 Trainer Package Upgrade V17

Engineering software; upgrade for 6 V10.5/V11/V12/V13/V14/V15/V15.1/V16

Single floating →V17 floating; software and documentation on DVD

License keys on USB; 9 languages: en, de, zh included and fr, es, it, ru, jp, kr as download

For configuration of SIMATIC S7-1200, SIMATIC Basic Panels

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

6 x SINAMICS Startdrive Basic license V17 for SINAMICS G120 CONTROL UNIT CU240E-2, CU250S-2, as of firmware V4.6

Package with:

1 x DVD SIMATIC STEP 7 Basic V17

1 x DVD PLCSIM V17

1 x DVD SINAMICS Startdrive Basic V17

NOTE for SIMATIC STEP 7 basic software: Only one hardware S7-1200, Basic Panel KTP400 and Basic Panel KTP700

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick
Order number:	6ES7822-0AA07-4YE5

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC KTP400 Basic Color Panel for LOGO!
ETHERNET

SIMATIC KTP400
Basic Color PN
6AV2123-2DB03-0AX0

SCALANCE
XB005
6GK5005-0BA00-1AB2

SIMATIC WinCC Basic V17
Engineering SW
6AV2100-0AA07-0AA5

ETHERNET cable
6XV1870-3RH60

Package 6AV2123-2DB03-0AA1
contains 1 x

Package 6AV2123-2DB03-0AA0
contains 6 x

Package 6AV2123-2DB03-0AA1
contains 2 x

Package 6AV2123-2DB03-0AA0
contains 12 x

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC KTP400 Basic Color Panel for LOGO!
ETHERNET 1er

1 x	SIMATIC KTP400 Basic Color PN, key and touch operation, 4" TFT display, 65536 colors, PROFINET interface configurable as of WinCC Basic V13/STEP 7 Basic V13	6AV2123-2DB03-0AX0
1 x	SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps; with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual	6GK5005-0BA00-1AB2
2 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	SIMATIC WinCC Basic V17, engineering software in the TIA Portal; floating license; software and documentation on DVD; license key on USB flash drive; class A; 6 languages: en, de, fr, es, it, zh; for configuration of SIMATIC Basic Panels. Please observe product release: support.industry.siemens.com entry ID: 109795525	6AV2100-0AA07-0AA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization for WinCC Basic on USB stick
Order number:	6AV2123-2DB03-0AA1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC KTP400 Basic Color Panel for LOGO!
ETHERNET 6er

6 x	SIMATIC KTP400 Basic Color PN, key and touch operation, 4" TFT display, 65536 colors, PROFINET interface configurable as of WinCC Basic V13/STEP 7 Basic V13	6AV2123-2DB03-0AX0
6 x	SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps; with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual	6GK5005-0BA00-1AB2
12 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
6 x	SIMATIC WinCC Basic V17, engineering software in the TIA Portal; floating license; software and documentation on DVD; license key on USB flash drive; class A; 6 languages: en, de, fr, es, it, zh; for configuration of SIMATIC Basic Panels. Please observe product release: support.industry.siemens.com entry ID: 109795525	6AV2100-0AA07-0AA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization for WinCC Basic on USB stick
Order number:	6AV2123-2DB03-0AA0

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC KTP700 Basic Color Panel for S7-1200

SIMATIC KTP700
Basic Color PN
6AV2123-2GB03-0AX0

SCALANCE
XB005
6GK5005-0BA00-1AB2

ETHERNET cable
6XV1870-3RH60

Package 6AV2123-2DB03-0AA1
contains 1 x

Package 6AV2123-2DB03-0AA1
contains 2 x

Package 6AV2123-2DB03-0AA0
contains 6 x

Package 6AV2123-2DB03-0AA0
contains 12 x

NOTE: SIMATIC STEP 7/WinCC ≥ V13 is absolutely necessary for configuration! Upgrade, see Basic Automation

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC KTP700 Basic Color Panel 1er

1 x	SIMATIC KTP700, basic color panel, key and touch operation, 7" TFT display, 65536 colors, PROFINET interface, configurable as of WinCC Basic V13/STEP 7 Basic V13	6AV2123-2GB03-0AX0
1 x	SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps; with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual	6GK5005-0BA00-1AB2
2 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60

NOTE: SIMATIC STEP 7/WinCC ≥ V13 is absolutely necessary for configuration! Upgrade, see Basic Automation

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Configuration software required
Order number:	6AV2123-2GB03-0AA1

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

SIEMENS

SIMATIC KTP700 Basic Color Panel 6er

6 x	SIMATIC KTP700, basic color panel, key and touch operation, 7" TFT display, 65536 colors, PROFINET interface, configurable as of WinCC Basic V13/STEP 7 Basic V13	6AV2123-2GB03-0AX0
6 x	SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps; with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual	6GK5005-0BA00-1AB2
12 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60

NOTE: SIMATIC STEP 7/WinCC ≥ V13 is absolutely necessary for configuration! Upgrade, see Basic Automation

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Configuration software required
Order number:	6AV2123-2GB03-0AA0

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

Controller
Overview

Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC ET 200SP Open Controller CPU 1515SP PC2 F with WinCC RT Advanced 512 PTs	1	1	V17	6ES7677-2SB42-4AB1	NEW
SIMATIC ET 200SP Open Controller CPU 1515SP PC2 TF with WinCC RT Advanced 512 PTs	1	1	V17	6ES7677-2WB42-4AB1	NEW
SIMATIC ET 200SP Distributed Controller CPU 1512SP F-1 PN Safety	1	1	V17	6ES7512-1SK00-4AB2	NEW
SIMATIC CPU 1512C-1 PN with software	1	1	V17	6ES7512-1CK00-4AB6	NEW
SIMATIC CPU 1512C-1 PN with Software and PM 1507	1	1	V17	6ES7512-1CK00-4AB1	NEW
SIMATIC CPU 1512C-1 PN with software and CP 1542-5 (CP PROFIBUS)	1	1	V17	6ES7512-1CK00-4AB7	NEW
SIMATIC CPU 1512C-1 PN with software, PM 1507 and CP 1542-5 (CP PROFIBUS)	1	1	V17	6ES7512-1CK00-4AB2	NEW
SIMATIC CPU 1517TF-3 PN/DP Safety with software without IOs (must be purchased separately)	1	1	V17	6ES7517-3UP00-4AB1	NEW
SIMATIC CPU 1516F PN/DP Safety with software	1	1	V17	6ES7516-3FN00-4AB2	NEW
SIMATIC CPU 1516 PN/DP with software	1	1	V17	6ES7516-3AN00-4AB3	NEW
Upgrade SIMATIC CPU 314C-2 PN/DP – **Available until 09/2022**	1			6ES7314-6EH04-4AB4	

Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780

ET 200SP Open Controller – Second Generation
CPU 1515SP PC2 F with S7-1500 SW Controller and WinCC RT Advanced 512 PTs

Orders before 09/2021 contain SW Status V16

ET 200SP Open Controller, CPU 1515SP PC2 F + HMI 512PT

BusAdapter

2 x DI 8x24 VDC/ 0.5A HF

2 x DQ 8x24 VDC/ 0.5A HF

4 x BaseUnits

1 x ETHERNET cable

STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for training, 1er license

Recommended accessories

6ES7134-6PA20-0BD0
Analog input module, AI Energy Meter

6ES7193-6BP00-0BD0
BaseUnit

6ES7193-6SC00-1AM0
5 shielding terminals

6ES7137-6BD00-0BA0
Communication Module IO-Link Master

6ES7193-6BP00-0DA0
BaseUnit

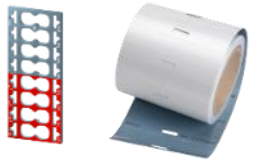
3RK7137-6SA00-0BC1
Communication Module ASI Master

6ES7193-6BP20-0DC0
BaseUnit

6GK1950-0BB00
Trainer Package: FastConnect cable set

6EP7133-6AE00-0BN0
Power Supply
Input: 120/230 V AC
output: 24 V DC/10 A

6EP7133-6AB00-0BN0
Power Supply
Input: 120/230 V AC
output: 24 V DC/5A



Color-coded labels, labeling strips

Expansions: ET 200SP analog modules: 6ES7155-6AU00-0AB6

NOTE: SIMATIC STEP 7 Professional ≥ V14 is absolutely necessary for configuration

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

ET 200SP Open Controller – Second Generation
CPU 1515SP PC2 F with S7-1500 SW Controller and WinCC RT Advanced 512 PTs

Orders before 09/2021 contain SW Status V16

1 x SIMATIC, standard mounting rail 35 mm, length 483 mm for 19" cabinet	6ES5710-8MA11
1 x SIMATIC ET 200SP Open Controller, CPU 1515SP PC2 F + HMI 512PT, 8 GB RAM, 128 GB CFast with Windows 10 IoT Enterprise 64 bit, S7-1500 Fail-safe Software Controller CPU 1505SP F and WinCC Runtime Advanced pre-installed, with 512 PowerTags license, interfaces: 1x slot CFast, 1x slot SD/MMC, 1x connection for ET 200SP BusAdapter PROFINET, 1x 10/100/1000 Mbps ETHERNET, 2x USB 3.0; 2x USB 2.0, 1x DisplayPort, documentation on CFast, restore image on CFast	6ES7677-2SB42-0GL0
2 x DI 8x24VDC/0.5A HF	6ES7131-6BF00-0CA0
2 x DQ 8x24VDC/0.5A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog max 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional from V15 required
Order number:	6ES7677-2SB42-4AB1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

ET 200SP Open Controller – Second Generation
CPU 1515SP PC2 TF with S7-1500 SW Controller & WinCC RT Advanced 512 PTs

Orders before 09/2021 contain SW Status V16

ET 200SP Open Controller, CPU 1515SP PC2 F + HMI 512PT

BusAdapter

2 x DI 8x24 VDC/ 0.5A HF

2 x DQ 8x24 VDC/ 0.5A HF

4 x BaseUnits

1 x ETHERNET cable

STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for training, 1er license

Recommended accessories

6ES7134-6PA20-0BD0
Analog input module, AI Energy Meter

6ES7193-6BP00-0BD0
BaseUnit

6ES7193-6SC00-1AM0
5 shielding terminals

6ES7137-6BD00-0BA0
Communication Module IO-Link Master

6ES7193-6BP00-0DA0
BaseUnit

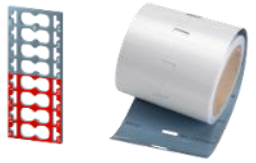
3RK7137-6SA00-0BC1
Communication Module ASI Master

6ES7193-6BP20-0DC0
BaseUnit

6GK1950-0BB00
Trainer Package: FastConnect cable set

6EP7133-6AE00-0BN0
Power Supply Input: 120/230 V AC output: 24 V DC/10 A

6EP7133-6AB00-0BN0
Power Supply Input: 120/230 V AC output: 24 V DC/5A



Color-coded labels, Labeling strips

Expansions: ET 200SP analog modules: 6ES7155-6AU00-0AB6

NOTE: SIMATIC STEP 7 Professional ≥ V14 is absolutely necessary for configuration

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

ET 200SP Open Controller – Second Generation
CPU 1515SP PC2 TF with S7-1500 SW Controller & WinCC RT Advanced 512 PTs

Orders before 09/2021 contain SW Status V16

1 x Standard mounting rail 35 mm, length 483 mm, for 19" cabinet	6ES5710-8MA11
1 x SIMATIC ET 200SP Open Controller, CPU 1515SP PC2 TF + HMI 512PT, 8 GB RAM, 128 GB CFast with Windows 10 IoT Enterprise 64 bit, S7-1500 Fail-safe Software Controller CPU 1505SP TF and WinCC Runtime Advanced pre-installed, with 512 PowerTags license, interfaces: 1x slot CFast, 1x slot SD/MMC, 1x connection for ET 200SP BusAdapter PROFINET, 1x 10/100/1000 Mbps ETHERNET, 2x USB 3.0; 2x USB 2.0, 1x DisplayPort, documentation on CFast, restore image on CFast	6ES7677-2SB42-0GL0
2 x DI 8x24VDC/0.5A HF	6ES7131-6BF00-0CA0
2 x DQ 8x24VDC/0.5A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog max 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional from V15 required
Order number:	6ES7677-2WB42-4AB1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

ET 200SP Distributed Controller
CPU 1512SP F-1 PN Safety

Orders before 09/2021 contain SW Status V16

1 x ET 200SP Distributed Controller

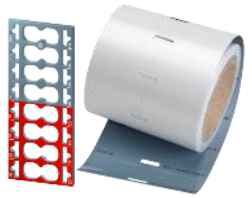
BusAdapter

2 x DI 8x24 VDC/ 0.5A HF

2 x DQ 8x24 VDC/ 0.5A HF

4 x BaseUnits

1 x ETHERNET cable



Color-coded labels, Labeling strips

1 x Memory Card 24 MB

Recommended accessories

6ES7134-6PA20-0BD0
Analog input module, AI Energy Meter

6ES7193-6BP00-0BD0
BaseUnit

6ES7193-6SC00-1AM0
5 shielding terminals

6ES7137-6BD00-0BA0
Communication Module IO-Link Master

6ES7193-6BP00-0DA0
BaseUnit

3RK7137-6SA00-0BC1
Communication Module ASI Master

6ES7193-6BP20-0DC0
BaseUnit

6GK1950-0BB00
Trainer Package: FastConnect cable set

6EP7133-6AE00-0BN0
Power Supply Input: 120/230 V AC output: 24 V DC/10 A

6EP7133-6AB00-0BN0
Power Supply Input: 120/230 V AC output: 24 V DC/5A

STEP 7 Professional and WinCC Advanced V17 SW for training, 1er license

NOTE: SIMATIC STEP 7 Professional and Safety Advanced ≥ V13 SP1 Update 4 are absolutely necessary for configuration

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

ET 200SP Distributed Controller
CPU 1512SP F-1 PN Safety

Orders before 09/2021 contain SW Status V16

1 x Standard mounting rail 35 mm, length 483 mm for 19" cabinet	6ES5710-8MA11
1 x CPU 1512SP F-1 PN for ET 200SP, central processing unit with work memory 300 KB for program and 1 MB for data, 1st interface, PROFINET IRT with 3-port switch, 48 ns bit performance, Memory Card required	6ES7512-1SK01-0AB0
1 x SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3,3 V Flash, 24 MB	6ES7954-8LF03-0AA0
2 x DI 8x24VDC/0.5A HF	6ES7131-6BF00-0CA0
2 x DQ 8x24VDC/0.5A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog max 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x STEP 7 Professional and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB600

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional and Safety Advanced as of V13 SP1 Update 4 required
Order number:	6ES7512-1SK00-4AB2

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC S7-1512C-1 PN

Trainer Package variants

1 x CPU 1512C-1 PN	1 x Memory Card 24 MB	1 x SIMATIC S7-1500, mounting rail 482 mm	1 x ETHERNET cable	STEP 7 Professional SW for training 1er license	1 x Power supply Input: 120/230 V AC; Output: 24 V DC, 8 A	1 x Communication processor (PROFIBUS) CP 1542-5	Order no.
☑	☑	☑	☑	☑			6ES7512-1CK00-4AB6
☑	☑	☑	☑	☑	☑		6ES7512-1CK00-4AB1
☑	☑	☑	☑	☑		☑	6ES7512-1CK00-4AB7
☑	☑	☑	☑	☑	☑	☑	6ES7512-1CK00-4AB2 1,337 EUR

Recommended accessories

6XV1870-3RH60
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6GK1950-0BB00
Trainer Package: FastConnect cable set

Core product for vocational World Cup Industrial Control ↗

worldskills

SIMATIC STEP 7 Professional ≥ V13 SP1 Update 4 is absolutely necessary for configuration

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC S7-1512C-1 PN
without power supply/without CP for PROFIBUS DP

1 x	SIMATIC S7-1500 Compact CPU, CPU 1512C-1 PN, central processing unit with work memory 250 KB for program and 1 MB for data, 32 digital inputs, 32 digital outputs, 5 analog inputs, 2 analog outputs, 6 high speed counters, 4 high speed outputs for PTO/PWM/frequency output, 1st interface: PROFINET IRT with 2-port switch, 48 ns bit performance, incl. front connector push-in, SIMATIC Memory Card required	6ES7512-1CK01-0AB0
1 x	SIMATIC S7-1500, mounting rail, 482 mm (approx. 19 inches) including grounding screw, integrated DIN rail for mounting of components such as terminals, miniature circuit breakers and relays	6ES7590-1AE80-0AA0
1 x	SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V Flash, 24 MB	6ES7954-8LF03-0AA0
1 x	SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	STEP 7 Professional and WinCC Advanced V17 Software for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional and Safety Advanced as of V13 SP1 Update 4 required
Order number:	6ES7512-1CK00-4AB6

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC S7-1512C-1 PN
with power supply/without CP for PROFIBUS DP

1 x	SIMATIC PM 1507 24 V/8 A stabilized power supply for SIMATIC S7-1500, input: 120/230 V AC, output: 24 V DC/8 A	6EP1333-4BA00
1 x	SIMATIC S7-1500 Compact CPU, CPU 1512C-1 PN, central processing unit with work memory 250 KB for program and 1 MB for data, 32 digital inputs, 32 digital outputs, 5 analog inputs, 2 analog outputs, 6 high speed counters, 4 high speed outputs for PTO/PWM/frequency output 1st interface: PROFINET IRT with 2-port switch, 48 ns bit performance, including front connector push-in, SIMATIC Memory Card required	6ES7512-1CK01-0AB0
1 x	SIMATIC S7-1500, mounting rail, 482 mm (approx. 19 inches) including grounding screw, integrated DIN rail for mounting of small components such as terminals, miniature circuit breakers and relays	6ES7590-1AE80-0AA0
1 x	SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V Flash, 24 MB	6ES7954-8LF03-0AA0
1 x	SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	STEP 7 Professional and WinCC Advanced V17 Software for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional and Safety Advanced as of V13 SP1 Update 4 required
Order number:	6ES7512-1CK00-4AB1

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC S7-1512C-1 PN
without power supply/with CP for PROFIBUS DP

1 x	SIMATIC S7-1500 Compact CPU, CPU 1512C-1 PN, central processing unit with work memory 250 KB for program and 1 MB for data, 32 digital inputs, 32 digital outputs, 5 analog inputs, 2 analog outputs, 6 high speed counters, 4 high speed outputs for PTO/PWM/frequency output, 1st interface: PROFINET IRT with 2-port switch, 48 ns bit performance, including front connector push-in, SIMATIC Memory Card required	6ES7512-1CK01-0AB0
1 x	Communications Processor CP 1542-5 for connection of SIMATIC S7-1500 to PROFIBUS DP DPV1 master or DP slave, S7 and PG/OP communication, time synchronization, diagnostics, lower configuration limits	6GK7542-5FX00-0XE0
1 x	SIMATIC S7-1500, mounting rail, 482 mm (approx. 19 inches) including grounding screw, integrated DIN rail for mounting of small components such as terminals, miniature circuit breakers and relays	6ES7590-1AE80-0AA0
1 x	SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V Flash, 24 MB	6ES7954-8LF03-0AA0
1 x	SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	STEP 7 Professional and WinCC Advanced V17 Software for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional and Safety Advanced as of V13 SP1 Update 4 required
Order number:	6ES7512-1CK00-4AB7

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC S7-1512C-1 PN
with power supply/with CP for PROFIBUS DP

1 x	SIMATIC PM 1507 24 V/8 A stabilized power supply for SIMATIC S7-1500, input: 120/230 V AC, output: 24 V DC/8 A	6EP1333-4BA00
1 x	SIMATIC S7-1500 Compact CPU, CPU 1512C-1 PN, central processing unit with work memory 250 KB for program and 1 MB for data, 32 digital inputs, 32 digital outputs, 5 analog inputs, 2 analog outputs, 6 high speed counters, 4 high speed outputs for PTO/PWM/frequency output, 1st interface: PROFINET IRT with 2-port switch, 48 ns bit performance, including front connector push-in, SIMATIC Memory Card required	6ES7512-1CK01-0AB0
1 x	Communications Processor CP 1542-5 for connection of SIMATIC S7-1500 to PROFIBUS DP DPV1 master or DP slave, S7 and PG/OP communication, time synchronization, diagnostics, lower configuration limits	6GK7542-5FX00-0XE0
1 x	SIMATIC S7-1500, mounting rail, 482 mm (approx. 19 inches) including grounding screw, integrated DIN rail for mounting of small components such as terminals, miniature circuit breakers and relays	6ES7590-1AE80-0AA0
1 x	SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V Flash, 24 MB	6ES7954-8LF03-0AA0
1 x	SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	STEP 7 Professional and WinCC Advanced V17 Software for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional and Safety Advanced as of V13 SP1 Update 4 required
Order number:	6ES7512-1CK00-4AB2

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC CPU 1517TF-3 PN/DP Safety with software
without IOs (must be purchased separately)

Orders before 09/2021 contain SW Status V16

1 x CPU
1517TF-3 PN/DP

1 x Power supply
Input: 120/230 V AC;
Output: 24 V DC, 8 A

1 x Memory
Card 256 MB

1 x ETHERNET
cable

1 x SIMATIC S7-1500,
mounting rail 482 mm

STEP 7 Professional and
WinCC Advanced V17 SW
for training, 1er license

SIMATIC STEP 7 Professional ≥ V16 is absolutely necessary for configuration

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC CPU 1517TF-3 PN/DP Safety with software
without IOs (must be purchased separately)

Orders before 09/2021 contain SW Status V16

1 x	SIMATIC PM 1507 24 V/8 A stabilized power supply for SIMATIC S7-1500, input: 120/230 V AC, output: 24 V DC/8 A	6EP1333-4BA00
1 x	SIMATIC S7-1500TF, CPU 1517TF-3 PN/DP, central processing unit with work memory 3 MB for program and 8 MB for data, 1st interface: PROFINET IRT with 2-port switch 2nd interface: ETHERNET, 3rd interface: PROFIBUS, 2 ns bit performance, SIMATIC Memory Card required	6ES7517-3UP00-0AB0
1 x	SIMATIC S7-1500, mounting rail 482.6 mm (approx. 19 inch); incl. grounding screw, integrated DIN rail for mounting	6ES7590-1AE80-0AA0
1 x	SIMATIC S7, Memory Card for S7-1X00 CPU, 3.3 V FLASH, 256 MBYTE	6ES7954-8LL03-0AA0
1 x	SIMATIC NET Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	STEP 7 Professional and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional from V16 required
Order number:	6ES7517-3UP00-4AB1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC CPU 1516F PN/DP Safety with software

Orders before 09/2021 contain SW Status V16

1 x CPU
1516 F PN/DP

1 x Digital
input module
DI 32 x 24 V DC

1 x Digital
output module
DQ 32 x 24VDC/0.5 A

1 x Analog
input module
AI 8 x U/I/RTD/TC

1 x Analog
output module
AQ 4 x U/I ST

1 x Power supply
Input: 120/230 V AC
Output: 24 V DC, 8 A

4 x Front
connector 40-pin

1 x Memory
Card 24 MB

1 x ETHERNET
cable, 6 m

1 x S7-1500, mounting
rail 482 mm

STEP 7 Professional and
WinCC Advanced V17 SW
for training, 1er license

NOTE: SIMATIC STEP 7 Professional and Safety Advanced ≥ V13 SP1 Update 4 are absolutely necessary for configuration

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC CPU 1516F PN/DP Safety with software

Orders before 09/2021 contain SW Status V16

1 x	SIMATIC PM 1507 24 V/8 A stabilized power supply, input: 120/230 V AC, output: 24 V DC/8 A	6EP1333-4BA00
1 x	SIMATIC S7-1500F, CPU 1516F-3 PN/DP, with work memory 1.5 MB for program, 5 MB for data, 1st interface, PROFINET IRT with 2-port switch 2nd interface, ETHERNET 3rd interface, PROFIBUS, 10 ns bit performance, SIMATIC Memory Card required	6ES7516-3FN02-0AB0
1 x	SIMATIC S7-1500, digital input module DI 32 x 24V DC, 32 channels in groups of 16	6ES7521-1BL00-0AB0
1 x	SIMATIC S7-1500, digital output module DQ 32 X 24 V DC/0.5 A; 32 channels	6ES7522-1BL01-0AB0
1 x	SIMATIC S7-1500, analog input module AI 8 x U/I/RTD/TC, 16-bit resolution, 8 channels, in groups of 8	6ES7531-7KF00-0AB0
1 x	SIMATIC S7-1500, analog output module AQ 4 x U/I ST; 16-bit resolution, 4 channels in groups of 4	6ES7532-5HD00-0AB0
1 x	SIMATIC S7-1500, mounting rail, 482 mm	6ES7590-1AE80-0AA0
1 x	SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V FLASH, 24 MB	6ES7954-8LF03-0AA0
4 x	SIMATIC S7-1500, front connector, screw-type, 40-pin	6ES7592-1AM00-0XB0
1 x	SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	STEP 7 Professional and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional and Safety Advanced V13 SP1 Update 4 required
Order number:	6ES7516-3FN00-4AB2

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC CPU 1516 PN/DP with software

Orders before 09/2021 contain SW Status V16

1 x CPU
1516 F PN/DP

1 x Digital
input module
DI 32 x 24 V DC

1 x Digital
output module
DQ 32 x 24VDC/0.5 A

1 x Analog
input module
AI 8 x U/I/RTD/TC

1 x Analog
output module
AQ 4 x U/I ST

1 x Power supply
Input: 120/230 V AC
Output: 24 V DC, 8 A

4 x Front
connector 40-pin

1 x Memory
Card 24 MB

1 x ETHERNET
cable, 6 m

1 x S7-1500, mounting
rail 482 mm

STEP 7 Professional and
WinCC Advanced V17 SW
for training, 1er license

NOTE: SIMATIC STEP 7 Professional and Safety Advanced ≥ V13 SP1 Update 4 are absolutely necessary for configuration

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC CPU 1516 PN/DP with software

Orders before 09/2021 contain SW Status V16

1 x	SIMATIC PM 1507 24 V/8 A stabilized power supply, input: 120/230 V AC, output: 24 V DC/8	6EP1333-4BA00
1 x	SIMATIC S7-1500, CPU 1516-3 PN/DP, central processing unit with 1 MB work memory for program and 5 MB for data, 1st interface: PROFINET IRT with 2-port switch 2nd interface: ETHERNET 3rd interface: PROFIBUS, 10 ns bit performance, SIMATIC Memory Card required	6ES7516-3AN02-0AB0
1 x	SIMATIC S7-1500, digital input module DI 32 x 24V DC, 32 channels in groups of 16	6ES7521-1BL00-0AB0
1 x	SIMATIC S7-1500, digital output module DQ 32 X 24VDC/0.5 A; 32 channels	6ES7522-1BL01-0AB0
1 x	SIMATIC S7-1500, analog input module AI 8 x U/I/RTD/TC, 8 channels in groups of 8	6ES7531-7KF00-0AB0
1 x	SIMATIC S7-1500, analog output module AQ 4 x U/I ST; 4 channels in groups of 4	6ES7532-5HD00-0AB0
1 x	SIMATIC S7-1500, mounting rail, 482 mm, incl. grounding screw, integrated DIN profile rail	6ES7590-1AE80-0AA0
1 x	SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V FLASH, 24 MB	6ES7954-8LF03-0AA0
4 x	SIMATIC S7-1500, front connector, screw-type, 40-pin	6ES7592-1AM00-0XB0
1 x	SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x	STEP 7 Professional NS WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	SIMATIC STEP 7 Professional V13 SP1 Update 4 required
Order number:	6ES7516-3AN00-4AB3

SIEMENS

Upgrade SIMATIC S7-314C-2PN/DP
for TIA Portal

1 x CPU314C-2 PN/DP
with 192 KB
work memory

1 x Digital module
SM 323, 16 DI and 16 DQ,
24 V DC, 0.5 A, 40-pin

1 x Micro Memory
Card 512 KB

3x Front connector
for SM, 40-pin

1 x ETHERNET
cable

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Upgrade SIMATIC S7-314C-2PN/DP
for TIA Portal

1 x	SIMATIC S7-300, CPU 314C-2PN/DP compact CPU with 192 KB work memory, 24 DI/16 DQ, 4AI, 2AQ, 1 PT100, 4 high speed counters (60 kHz), 1st interface MPI/DP 12 Mbps 2nd interface ETHERNET PROFINET, with 2-port switch, integrated 24 V DC power supply, front connector (2 x 40-pin) and Micro Memory Card required	6ES7314-6EH04-0AB0
1 x	SIMATIC S7, Micro Memory Card for S7-300, 3.3 V NFlash, 512 KB	6ES7953-8LJ31-0AA0
1 x	SIMATIC S7-300, Digital Module SM 323, potential-separated, 16 DI and 16 DQ, 24 V DC, 0.5 A, total current 4 A, 1 x 40-pin	6ES7323-1BL00-0AA0
3 x	SIMATIC S7-300, front connector 392 with screw contacts, 40-pin	6ES7392-1AM00-0AA0
1 x	SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60

Recommended accessories

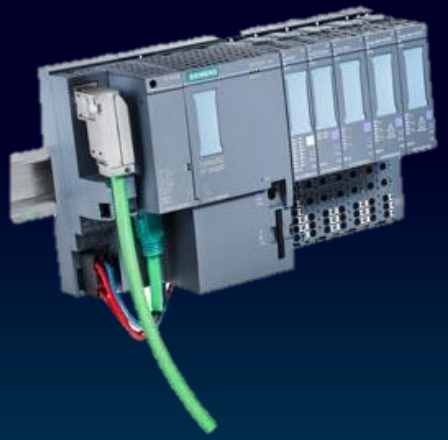
6GK1950-0BB00
Trainer Package:
FastConnect cable set

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC	
Sales note:	Schools, colleges and universities, for in-house vocational training departments	
Technical note:	SIMATIC STEP 7 Professional as of V5.5 and as of V13 required	
Order number:	6ES7314-6EH04-4AB4	Available until September 2022

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Distributed IOs
Overview



Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC ET 200SP digital PROFINET	1			6ES7155-6AU00-0AB0	
SIMATIC ET 200SP digital with input module ENERGY METER PN	1			6ES7155-6AU00-0AB1	
SIMATIC ET 200SP digital with communication module IO-LINK MASTER V1.1 PN	1			6ES7155-6AU00-0AB2	
SIMATIC ET 200SP digital with communication module CM AS-i MASTER ST PN	1			6ES7155-6AU00-0AB3	
SIMATIC ET 200SP analog expansion module	1			6ES7155-6AU00-0AB6	
SIMATIC ET 200SP safety expansion module	1			6ES7136-6BA00-0AB1	

SIMATIC ET 200SP digital PROFINET

1 x IM 155-6 PN HF
incl. server module

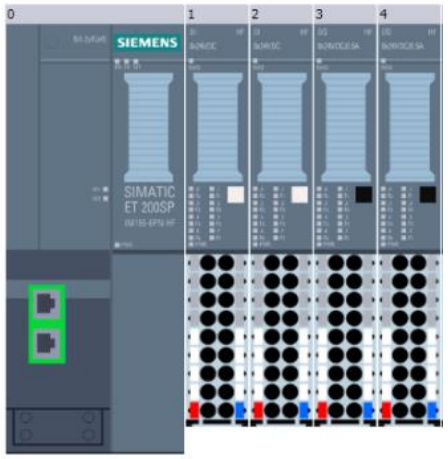
BusAdapter

2 x DI 8x24V DC HF

2 x DQ 8x24V DC/0.5A HF

4 x BaseUnits

Color-coded labels
Labeling strips



Recommended accessories

6XV1870-3RH60
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6GK1950-0BB00
Trainer Package: FastConnect cable set

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC ET 200SP digital PROFINET

1 x Standard mounting rail 35 mm, length 483 mm for 19" cabinet	6ES5710-8MA11
1 x IM155-6PN HF including server module	6ES7155-6AU01-0CN0
2 x DI 8x24VDC HF	6ES7131-6BF00-0CA0
2 x DQ 8x24V DC/0.5 A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	STEP 7 as of V5.5 and as of V13 required
Order number:	6ES7155-6AU00-0AB0

SIEMENS

SIMATIC ET 200SP digital with Energy Meter input module PN

1 x IM 155-6 PN HF incl. server module

BusAdapter

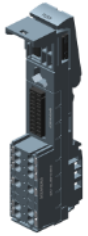
2 x DI 8x24V DC HF

2 x DQ 8x24V DC/ 0.5A HF

4 x BaseUnits

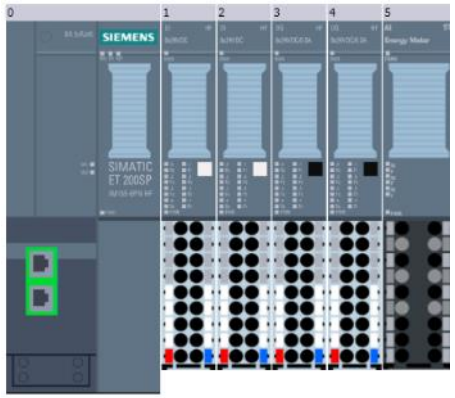
Color-coded labels
Labeling strips

1 x Energy Meter



1 x BaseUnit

1 x Shielding terminals



Recommended accessories

6XV1870-3RH60
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6GK1950-0BB00
Trainer Package: FastConnect cable set

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC ET 200SP digital with Energy Meter input module PN

1 x Standard mounting rail 35 mm, length 483 mm, for 19" cabinet	6ES5710-8MA11
1 x IM155-6PN HF including server module	6ES7155-6AU01-0CN0
2 x DI 8x24VDC HF	6ES7131-6BF00-0CA0
2 x DQ 8x24VDC/0.5A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x AI Energy Meter ST	6ES7134-6PA20-0BD0
1 x BaseUnit Push-in terminals, without AUX terminals, jumpered to left	6ES7193-6BP00-0BD0
1 x Shielding terminals, 5 units	6ES7193-6SC00-1AM0

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	STEP 7 as of V13 required
Order number:	6ES7155-6AU00-0AB1

SIEMENS

SIMATIC ET 200SP digital with IO-Link communication module

1 x IM 155-6 PN HF
incl. server module

BusAdapter

2 x DI 8x24V DC HF

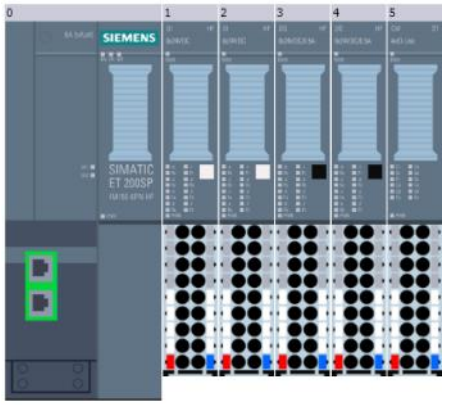
2 x DQ 8x24V DC/
0.5A HF

4 x BaseUnits

Color-coded labels
Labeling strips

1 x CM 4xIO-Link ST

1 x BaseUnit



IO-Link

Recommended accessories

6XV1870-3RH60
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6GK1950-0BB00
Trainer Package: FastConnect cable set

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC ET 200SP digital with IO-Link communication module

1 x Standard mounting rail 35 mm, length 483 mm for 19" cabinet	6ES5710-8MA11
1 x IM155-6PN HF including server module	6ES7155-6AU01-0CN0
2 x DI 8x24VDC HF	6ES7131-6BF00-0CA0
2 x DQ 8x24VDC/0.5A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x CM 4xIO-Link ST	6ES7137-6BD00-0BA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC04, 10 units	6ES7193-6CP04-2MA0

Matching: Trainer Package SIRIUS Industrial Controls 3TK3388-0TP00

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	STEP 7 as of V13 required
Order number:	6ES7155-6AU00-0AB2

IO-Link

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC ET 200SP digital with AS-i Master communication module

1 x IM 155-6 PN HF
incl. server module

BusAdapter

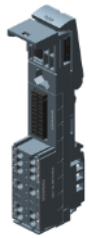
2 x DI 8x24V DC HF

2 x DQ 8x24V DC/
0.5A HF

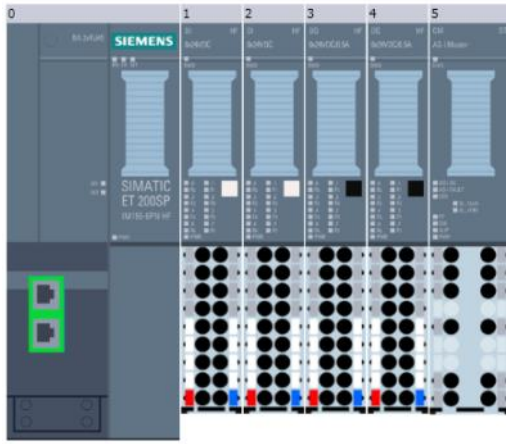
4 x BaseUnits

Color-coded labels
Labeling strips

1 x CM 4xIO-Link ST



1 x BaseUnit



Recommended accessories

6XV1870-3RH60
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6GK1950-0BB00
Trainer Package: FastConnect cable set

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC ET 200SP digital with AS-i Master communication module

1 x standard mounting rail 35 mm, length 483 mm for 19" cabinet	6ES5710-8MA11
1 x IM155-6PN HF including server module	6ES7155-6AU01-0CN0
2 x DI 8x24V DC HF	6ES7131-6BF00-0CA0
2 x DQ 8x24V DC/0.5A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x CM AS-i Master ST ET 200SP (AS-i V3.0)	3RK7137-6SA00-0BC1
1 x BU type C0, BU20-P6+A2+4D	6ES7193-6BP20-0DC0

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	STEP 7 as of V13 required
Order number:	6ES7155-6AU00-0AB3

SIEMENS

SIMATIC ET 200SP Analog module expansion

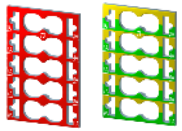
SIMATIC ET 200SP **analog module expansion** consisting of:

2 x AI 2xU/I 2-/4-wire HS	6ES7134-6HB00-0DA1
1 x AQ 2xU/I HS	6ES7135-6HB00-0DA1
3 x BU type A0, 16 push-in, 2 infeed terminals (digital/analog, max. 24 V DC/10A)	6ES7193-6BP00-0DA0
1 x Shielding terminals, 5 units	6ES7193-6SC00-1AM0
1 x Color-coded labels, 16 process terminals, gray/red/blue, CC03, 10 units	6ES7193-6CP03-2MA0

2 x AI 2xU/I 2-/4-wire HS

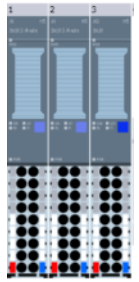
1 x AQ 2xU/I HS

5 x Shielding terminals



Color-coded labels

3 x BaseUnits



System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	STEP 7 as of V13 required
Order number:	6ES7155-6AU00-0AB6

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC ET 200SP Safety module expansion

SIMATIC ET 200SP **safety module expansion** consisting of:

1 x Electronic module F-DI 8x24V DC HF	6ES7136-6BA00-0CA0
1 x Electronic module F-DQ 4x24V DC/2A PM HF	6ES7136-6DB00-0CA0
1 x Electronic module F-RQ 24VDC/24..230V AC/5A	6ES7136-6RA00-0BF0
2 x BaseUnits BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x BaseUnits BU type F0, push-in terminals, with 4 AUX terminals	6ES7193-6BP20-0BF0
1 x SIMATIC ET 200SP, 1000 labeling strips, yellow	6ES7193-6LA10-0AG0

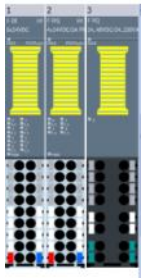
1x F-DI
8x24VDC HF

1x F-DQ
4x24VDC/2A PM HF

1x F-RQ
DC24V/AC24..230V/5A

Labeling
strips

3 x BaseUnits

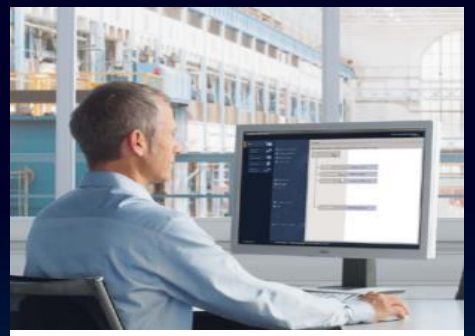


System requirements:	None available
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	STEP 7 as of V13 required
Order number:	6ES7136-6BA00-0AB1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Operator control & monitoring
Overview



SW functionally identical to the industrial version

Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC MTP700 Unified Comfort Panel	1	1	V17	6AV2128-3GB06-4AB1	NEW ○
SIMATIC MTP1500 Unified Comfort Panel	1	1	V17	6AV2128-3QB06-4AB1	NEW ○
SIMATIC TP700 Comfort Color Panel – **Available until 09/2022**	1	1	V17	6AV2133-4AF00-0AA0	NEW ○
SIMATIC TP1500 Comfort Color Panel – **Available until 09/2022**	1	1	V17	6AV2133-4BF00-0AA0	NEW ○
SCADA system SIMATIC WinCC with options Only WIN10 (64-bit) Professional 1903/Enterprise 1903		6	V7.5 SP2	6AV6371-1DH07-5AX5	NEW
SCADA system SIMATIC WinCC with options – ASIA Only WIN10 (64-bit) Professional 1903/Enterprise 1903		6	V7.5 SP2	6AV6371-1DH07-5AV5	NEW
Upgrade SCADA system SIMATIC WinCC with options from V1.0 → Only WIN10 (64-bit) Professional 1903/Enterprise 1903		6	V7.5 SP2	6AV6381-1BP07-5AX3	NEW

○ Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780

SIEMENS

SIMATIC MTP700/MTP1500 Unified Comfort Panels with PROFINET

Orders before 09/2021 contain SW Status V16

1 x 7” SIMATIC HMI MTP700, Unified Comfort Panel — 6AV2128-3GB06-0AX0
touch operation, 7" widescreen TFT display, 16 million colors, PROFINET interface, configurable from WinCC Unified Comfort V16, contains open source software, which is provided free of charge, see enclosed Blu-Ray

MTP 700 can be configured with WinCC Unified as of V16

Alternative:

1 x 15” SIMATIC HMI MTP1500, Unified Comfort Panel — 6AV2128-3QB06-0AX0
touch operation, 15.6" widescreen TFT display, 16 million colors, PROFINET interface, configurable from WinCC Unified Comfort V16, contains open source software, which is provided free of charge, see enclosed Blu-Ray

MTP 1500 can be configured with WinCC Unified as of V16

Also included in the package:

1 x STEP 7 Professional and WinCC Unified V17 SW for Training, 1er license — 6ES7822-1AA07-4YA5

1 x SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m — 6XV1870-3RH60

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick
Order number:	6AV2128-3GB06-4AB1 (with MTP700) 6AV2128-3QB06-4AB1 (with MTP1500)

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC TP700/TP1500 Comfort Panel
with PROFINET and MPI/PROFIBUS DP Interface

Orders before 09/2021 contain SW Status V16

1 x 7” SIMATIC TP700 Comfort, Touch Panel with PROFINET and MPI/PROFIBUS DP INTERFACE (Panel with integrated switch with 2x RJ45 port) — 6AV2124-0GC01-0AX0

TP 700 can be configured with WinCC Comfort, Advanced, Prof. as of V11 SP2

Alternative:

1 x 15” SIMATIC TP1500 Comfort, Touch Panel with PROFINET and MPI/PROFIBUS DP INTERFACE (Panel with integrated switch with 2x RJ45 port) — 6AV2124-0QC02-0AX1

TP 1500 can be configured with WinCC Comfort, Advanced, Prof. as of V14 SP1

Also included in the package:

1 x STEP 7 Professional WinCC Advanced V17 SW for Training, 1er license — 6ES7822-1AA07-4YA5

1 x SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m — 6XV1870-3RH60

Available until September 2022

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick
Order number:	6AV2133-4AF00-0AA0 (with TP700) 6AV2133-4BF00-0AA0 (with TP1500)

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SCADA system SIMATIC WinCC V7.5 SP2 with options
6er classroom license

SCADA system SIMATIC WinCC V7.5 SP2 with options, additionally available as ASIA variant

6 x WinCC System software, RC 2048 (2048 Power Tags), Runtime/Configuration Software
6 x WinCC/User Archives
6 x WinCC/Connectivity Pack
6 x SIMATIC WinCC/Web Navigator, 3 Client Licenses (countable)
6 x SIMATIC WinCC/DataMonitor, 1 Client Licenses (countable)
6 x SIMATIC WinCC/Cloud Connect V7.5 SP2

Upgrade SCADA system SIMATIC WinCC with options from V1.0 to V7.5 SP2

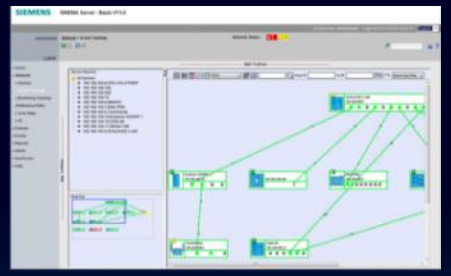
6 x Upgrade WinCC System software, RC 2048 (2048 Power Tags), Runtime/Configuration Software
6 x Upgrade WinCC/User Archives
6 x Upgrade WinCC/Connectivity Pack
6 x Upgrade SIMATIC WinCC/Web Navigator, 3 client licenses (countable)
6 x Upgrade SIMATIC WinCC/DataMonitor, 1 client licenses (countable)
6 x SIMATIC WinCC/Cloud Connect V7.5 SP2

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC		
Sales note:	Schools, colleges and universities, for in-house vocational training departments		
Technical note:	Authorization on USB stick		
Order number:	6AV6371-1DH07-5AX5	ASIA 6AV6371-1DH07-5AV5	Upgrade from V1.0,… to V7.5 SP2 6AV6381-1BP07-5AX3

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Industrial communication
Overview



Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC NET SINEC NMS 50 V.1		6	V1.0	6GK1950-0BB06	NEW ○
FASTCONNECT Cable Set	1			6GK1950-0BB00	
IE SCALANCE switch XC208	1			6GK1950-0BB12	○
IE SCALANCE S615 with Software SINEMA RC Basic	1	1		6GK1950-0BB13	○
IE SCALANCE S615 LAN router	2			6GK1950-0BB23	○
Development Kit PROFINET	1			6ES7195-3BE00-4AB1	

○ Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780

SIEMENS

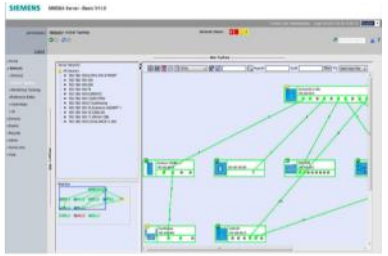
SINEC NMS 50 V1.0

6 x SINEC NMS 50 V1.0 6GK8781-1BA01-0AA0

SINEC NMS 50 V1.0. Type of delivery: DVD. Network management software for administration of industrial networks, monitoring, network configuration, license type: single. Monitorable IP devices: 50. Windows 10 Version 1709 (64-bit), Windows Server 2016 and 2019 Version 1607 (64-bit)

Totally Integrated Automation **PORTAL**

Check HW compatibility for TIA Portal ↗



System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Authorization on USB stick
Order number:	6GK1950-0BB06

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

FASTCONNECT cable set

1 x FastConnect
Stripping tool

2 X SIMATIC NET
IE FC RJ45
Plug connector

4 x SIMATIC NET
IE FC RJ45 PLUG 90 2X2, RJ45
Plug connector

1 x SIMATIC NET IE FC M12
PLUG PRO M12
Plug connector

1x M12
Cable connector

1 x 50 meter, GP 2X2 TP
Installation cable

2x SIMATIC NET,
Industrial ETHERNET

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

FASTCONNECT cable set

1 x	FastConnect stripping tool	6GK1901-1GA00
2 x	SIMATIC NET IE FC RJ45 plug connector (10/100MBPS) with rugged metal housing and FC connecting method for IE FC cable 2x2, 180 degree cable outlet, 1 pack = 10 pcs	6GK1901-1BB10-2AB0
4 x	SIMATIC NET IE FC RJ45 Plug 90 2x2, RJ45 plug connector (10/100 MBPS) with rugged metal housing and FC connecting method for IE FC cable 2X2 90 degree cable outlet, 1 pack = 1 pcs	6GK1901-1BB20-2AA0
1 x	SIMATIC NET IE FC M12 Plug Pro M12 plug connector with axial cable outlet 1 pack = 8 pcs for SCALANCE X208 PRO and ET 200 PRO PN	6GK1901-0DB20-6AA8
1 x	M12 cable connection per socket for connection of SCALANCE W-700/X208PRO for 24 V DC voltage supply, 3 pcs.	6GK1907-0DC10-6AA3
1 x	50 m flexible cable, GP 2x2 TP installation cable with flexible strand, PROFINET Type B, 4-wire	6XV1870-2B
2 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60

Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GK1950-0BB00

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

IE SCALANCE switch XC208/SIMATIC NET

1 x SCALANCE XC208 6GK5208-0BA00-2AC2

SCALANCE XC208 managed layer 2 IE switch; 8x 10/100 Mbps RJ45 ports;
1x console port; diagnostics LED; redundant power supply; temperature range -40 °C to +70 °C;
mounting: DIN rail/S7 mounting rail/wall Office redundancy functions features (RSTP, VLAN,...);
PROFINET IO device ETHERNET/IP-compliant C-plug slot

1 x SIMATIC NET, C-PLUG 6GK1900-0AB00

Removable data storage medium for simple device replacement in case of fault,
for recording configuration or configuration and application data

Recommended accessories

6XV1870-3RH60
Industrial Ethernet TP XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, pre-assembled with 2 RJ45 connectors, length 6 m

6GK5 980-3BB00-0AA5
Serial cable RJ11/RS232; pre-assembled serial cable with RJ11 and RS232 connector; length 3 m; 1 pack = 1 unit spare part

6GK1950-0BB00
Trainer Package:
FastConnect cable set

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GK1950-0BB12

Core product for vocational World Cup Industrial Control ↗

worldskills

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC NET Industrial Security Switch Technologies –
IE SCALANCE S615 with SINEMA RC basic software

1 x **SIMATIC NET SCALANCE S615 LAN ROUTER**
For protection of devices/networks in automation technology and for protection of industrial communication by VPN and firewall; additional functions: address conversion (NAT/NAPT), connection to SINEMA RC, 5-port switch, 1 x digital input, 1 x digital output

6GK5615-0AA00-2AA2

1 x **SINEMA Remote Connect Virtual Appliance**; basic software package for 4 VPN connections. User, device, group management; certificate management; autoconfiguration interface SINEMA RC client: for 1 installation. Software, documentation on DVD; license key on USB flash drive; 2 languages (de, en)

6GK1720-1AH01-0BV0

1 x **SINEMA RC Client V3 for 8 installations;** Software, documentation on DVD, license key for server; 3 languages (de, en, zh), Windows 10 Pro, Windows Server 2008, 2012 R2, 2016, 2019 (64-bit)

6GK1721-1XG03-4AB1

1 x **SINEMA RC Upgrade 64** Upgrade by 64 VPN connections, only license

6GK1722-1JH01-0BV0

1 x **KEY-PLUG SINEMA RC**, Removable data storage medium for enabling the connection to SINEMA Remote Connect for S615 and SCALANCE M for simple device replacement in the event of a fault and for recording configuration data

6GK5908-0PB00

1 x **SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45**, CAT 6 A, crossed TP cable 4X2, length 6 m

6XV1870-3RH60

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GK1950-0BB13

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC NET Industrial Security Switch Technologies –
IE SCALANCE S615 LAN router

2 x **SIMATIC NET SCALANCE S615 LAN ROUTER**
SCALANCE S615 LAN router; for protection of devices/networks in automation technology and for protection of industrial communication by VPN and firewall; additional functions: address conversion (NAT/NAPT), connection to SINEMA RC, 5-port switch, 1 x digital input, 1 x digital output

6GK5615-0AA00-2AA2

2 x **KEY-PLUG SINEMA RC,** removable data storage medium for enabling the connection to SINEMA Remote Connect for S615 and SCALANCE M for simple device replacement in the event of fault and for recording configuration data

6GK5908-0PB00

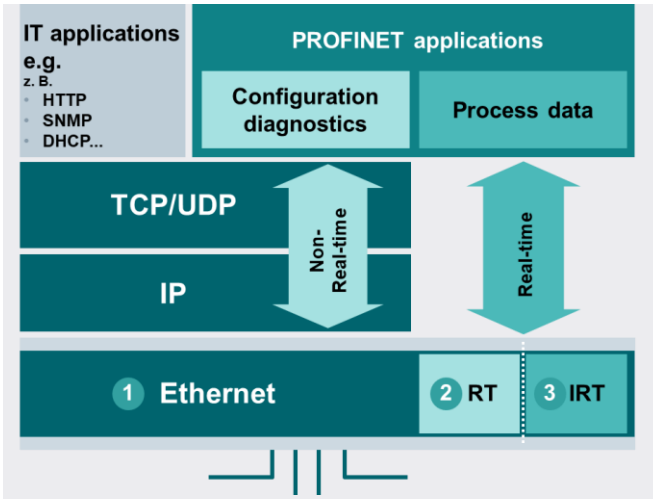
System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GK1950-0BB23

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Development Kit – PROFINET & PROFISAFE

1 x	EK-ERTEC 200P PN IO evaluation kit for PN IO, device based on ERTEC 200P Evaluation Board EB 200P, example software, documentation	6ES7195-3BE00-0YA0
1 x	PROFINET driver for controller, development package for PROFINET IO controller V2.1, on CD-ROM, source code with example implementation, IRT controller in connection with CP1625 Dev. (to be ordered separately)	6ES7195-3AA00-0YA0
1 x	PROFIsafe starter kit V3.5 according to PROFIsafe profile V2.6.1	6ES7195-3BF03-0YA0
1 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60

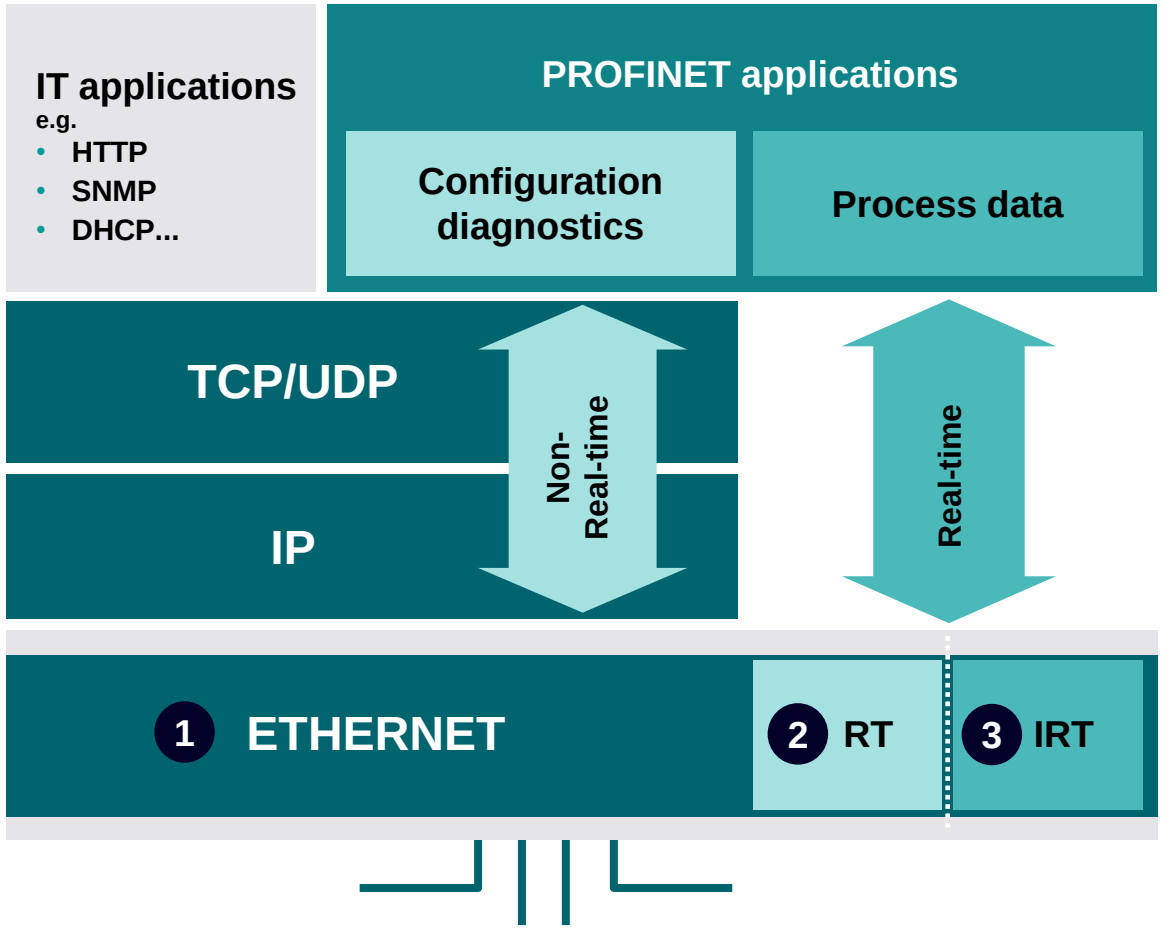


Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Support by ComDeC – Communication, Development & Certification
Order number:	6ES7195-3BE00-4AB1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Development Kit – PROFINET & PROFISAFE
The PROFINET stack



1 TCP/IP (IEEE802.3)
- Parameter assignment and configuration
- Diagnostic data
- Send authorization for user data channel

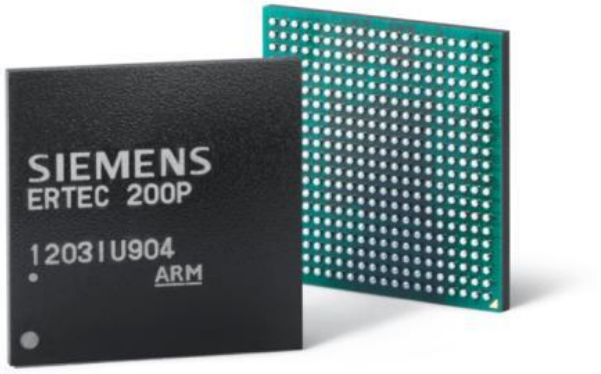
2 Real-time (RT)
- Cyclic high-performance transfer (up to 1 ms cycle time) of user data
- Event-dependent messages/warnings

3 Isochronous real-time (IRT)
- Cyclic synchronous transfer of user data
- Hardware support from ERTEC
- Jitter < 1 µsec

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Development Kit – PROFINET & PROFISAFE
Evaluation Kit for ERTEC 200P-2



High speed with the ERTEC 200P-2

- Support of performance upgrade from PROFINET according to specification V2.3
  → Cycle times as fast as **31.25 µs** achievable
  (Eval Kit V4.5 enables 125 µs)
- **Isochronous** connection of applications to PROFINET
- **ARM 926** with **250 MHz** for demanding applications

Fast start in development with Evaluation Kit

- Complete PROFINET stack in **source code**
- **Evaluation board** for ERTEC 200P-2 (EB 200P)
- **Application examples** based on ERTEC 200P-2
- License-free **development tools** an **real-time operating system** eCos

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Development Kit – PROFINET & PROFISAFE
PROFIsafe Starter Kit

Advantages

- The Development Kit supports the development of a **PROFIsafe** field device based on **PROFINET**
- The PROFIsafe Starter Kit V3.5 **complies with V2.6.1** of the **PROFIsafe profile**, specified in IEC 61784-3.
- Meets a range of user requirements such as signal-specific passivation and watchdog expansion for configuration in run

Contents

- Current PROFIsafe specification
- PROFIsafe driver software (PSD) with PROFIsafe certificate
- CRC calculation tools
- iPar Server function block (software and instructions)
- Verify code
- Programming manual and PROFIsafe manual
- Sample application

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Development Kit – PROFINET & PROFISAFE
The PROFINET Driver for controllers

Key features

- Support of PROFINET with RT (cycle time down to 1 ms) when using a real-time operating system
- Example implementation for Windows (cycle time down to 32 ms)
- Example implementation for SIMATIC IPC hardware
- XML interface for configuration

Scope of delivery

Product CD

- Source code of the PROFINET driver for controllers on CD
- Documentation

Customer Support Portal

- HSP for TIA Portal
- Further tools for development tools (a.o. trace)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Industrial identification
Overview

Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC MV540 S code reader PROFINET – no shape recognition	1			6GF3500-1TP03	NEW
SIMATIC RF200 RFID system PROFINET	1			6GT2096-3AA00-0AA1	NEW
SIMATIC RF200 RFID system IO-Link	1			6GT2096-5AA00-0AA0	
SIMATIC RF300 RFID system PROFINET	1			6GT2096-1AA00-0AA1	NEW
SIMATIC RF600 RFID system PROFINET	1			6GT2811-6CC10-0XB0	NEW

Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780

SIEMENS

SIMATIC MV540 HR optical reader PROFINET

1 x MV440 optical reader

1 x Lens 25 mm

Built-in ring light

1 x Text-Genius Plus OCR License
Note: Licenses can only be used from mid-2023

1 x PAT-Genius License
Note: Licenses can only be used from mid-2023

1 x Mounting plate

1 x Protection tube for lens

1 x Power data cable

1 x IE cable

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC MV540 S HR optical reader PROFINET

1 x SIMATIC MV540 H optical reader; resolution: 800 x 600 pixels; function: 1D/2D code reading; Image field and distance: variable, (depends on lens); PoE; IP67 with 6GF3540-8ADxx; delivery: Reader and SD card adapter	6GF3540-0CD10
1 x MV440-MV500 mounting plate; material: stainless steel (4 mm), versatile use	6GF3440-8CA
1 x MINI-CX lens 25 mm, E-focus for MV500 devices	6GF3540-8EA03-0LL0
1 x D65 lens protection metal glass, degree of protection IP67 for MV440 and MV540 devices	6GF3440-8AC11
1 x Built-in ring light MV540 red multi for MV540 devices; incl. cross-polarization filter; lighting range up to 120 cm	6GF3540-8DA13
1 x Power-IO-DATA cable MV500 10 m for MV540 devices; M12 – 12-pin socket pre-assembled at one end, 10 m	6GF3500-8BA21
1x IE connecting cable M12-90/IE FastConnect RJ45 plug 145, length 10 m	6XV1870-8GN10
1 x IE FastConnect RJ45 plug 90 2x2, RJ45 plug connector (10/100 Mbps) with rugged metal enclosure and FC connection system for IE FC cable 2x 2; 180° cable outlet	6GK1901-1BB10-2AA0
1 x OCR license for MV440/MV540 code reading systems; Single license	6GF3400-1SL01 *)
1 x Pat-Genius; object detection license for MV500 and MV400, single license	6GF3400-0SL03 *)

*) Licenses can only be used from mid-2023

Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	Parameter assignment with Web-based user interface, browser (as of IE5.5), JAVA-VM (MS, SUN)
Order number:	6GF3500-1TP03

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIMATIC RF200 RFID system PROFINET

2 x RF200 Reader
RF240R

1 x RFID Communication
Module RF186CI

1 x Power M12
cable connector

1 x IE Connecting
cable M12-180/IE FC RJ45

2 x SIMATIC RF,
MV connecting cable

5 x Transponder MDS
D428 for RF200/RF300

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC RF200 RFID system PROFINET

2 x	SIMATIC RF200 reader RF240R; RS422 interface (3964R); IP67, -25 to +70 °C; 50x 50x 30 mm; with integrated antenna	6GT2821-4AC10
1 x	RFID communication module RF186CI for PROFINET; ETHERNET, 2 readers can be connected; DI/DO interface	6GT2002-0JE50
1 x	Power M12 cable connector PRO axial cable outlet for field assembly, socket insert L-coded (socket)	6GK1906-0EB00
1 x	IE connecting cable M12-180/IE FC RJ45 Plug-145; IE FC trailing cable GP pre-assembled with M12 connector (D-coded) and IE FC RJ45 plug; length 2.0 m	6XV1871-5TH20
2 x	SIMATIC RF, MV plug-in cable, assembled, between ASM 456, RF160C, RF170C, RF18XC and reader or extension cable for ASM 456, RF160C, RF170C, RF18XC with RF, MV, MOBY PUR, trailing, length 2 m	6GT2891-4FH20
5 x	Transponder MDS D428 for RF200/RF300 ISO/MOBY D Screw transponder M8 long; ISO 15693, Chip type FUJITSU MB89R118, 2000 byte FRAM user memory 24x 20 mm (DxH); SW22	6GT2600-4AK00-0AX0

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GT2096-3AA00-0AA1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC RF200 RFID system IO-Link

2 x	SIMATIC RF200 reader RF210R IO-Link interface V1.1; IP67, -25 to +70 °C; M18x 83 mm; with integrated antenna 32 bytes IO; 230 Kbps	6GT2821-1BC32
2 x	SIMATIC RF IO-Link connecting cable, assembled, between IO-Link master and reader, M12 4-pin and open end, PUR, length 5m	6GT2891-4LH50
5 x	Transponder MDS D428 for RF200/RF300 ISO/MOBY D screw transponder M8 long; ISO 15693, chip type FUJITSU MB89R118, 2000 byte FRAM user memory 24x 20 mm (DxH); SW22	6GT2600-4AK00-0AX0

2 x SIMATIC RF200 reader
RF210R IO-Link interface

2 x Connecting cable
SIMATIC RF IO-Link

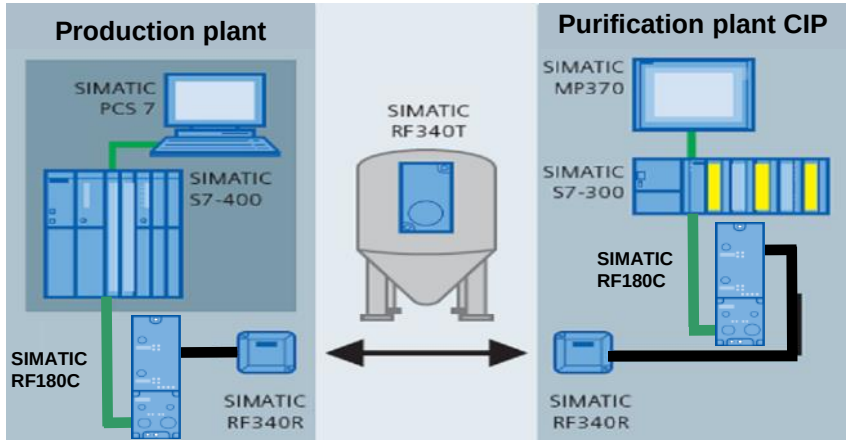
5 x Transponder MDS D428

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GT2096-5AA00-0AA0

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC RF300 RFID system PROFINET

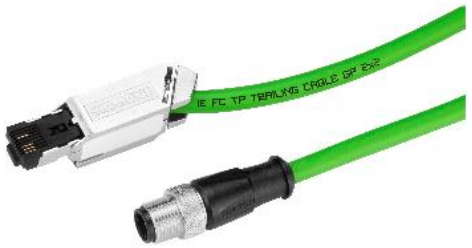


Tank monitoring by RFID nameplates, documentation of process data

1 x RFID Communication Module RF186CI for PROFINET/ETHERNET

2 x SIMATIC RF, MV plug-in cable

1 x Power M12 cable connector



1 x IE connecting cable M12-180/IE FC RJ45

2 x SIMATIC RF300; Reader RF310R (GEN2)

5 x SIMATIC RF300 Transponder RF340T

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC RF300 RFID system PROFINET

1 x	RFID communication module RF186CI for PROFINET; ETHERNET, 2 readers can be connected; DI/DO interface	6GT2002-0JE50
2 x	SIMATIC RF, MV plug-in cable, assembled, between ASM 456, RF160C, RF170C, RF18XC and reader or extension cable for ASM 456, RF160C, RF170C, RF18XC with RF, MV, MOBY PUR, trailing, length 2 m	6GT2891-4FH20
1 x	Power M12 cable connector PRO axial cable outlet for field assembly, socket insert, L-coded (socket)	6GK1906-0EB00
1 x	IE connecting cable M12-180/IE FC RJ45 Plug-145; IE FC trailing cable GP pre-assembled with M12 connector (D-coded) and IE FC RJ45 plug; Length 2.0 m	6XV1871-5TH20
2 x	SIMATIC RF300; reader RF310R (GEN2); RS422 interface (3964R); IP67. -25 to +70 °C, 55x 75x 30 mm, with integrated antenna	6GT2801-1BA10
5 x	SIMATIC RF300 transponder RF340T 8 KB FRAM, IP67/X9K, -25 to +85 °C, 48x2 5x 15 mm	6GT2800-4BB00

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GT2096-1AA00-0AA1

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC RF600 RFID system PROFINET

2 x SIMATIC RF615R
Reader 133x155x45mm
with internal antenna

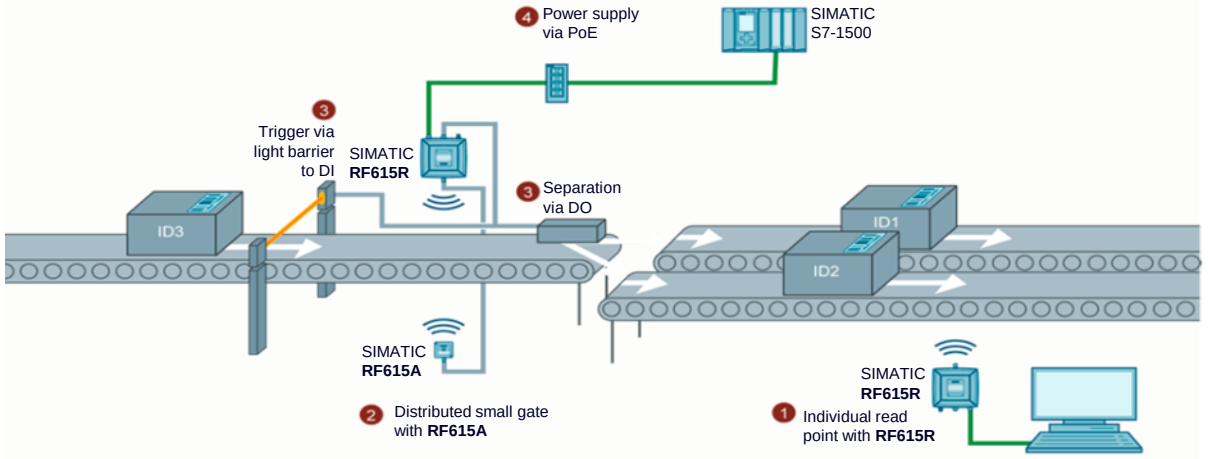
2 x SIMATIC RF642A
Antenna 185x185x47mm

20 x SIMATIC RF645T
Transponder with
mounting cover

1 x Wide-range power supply
for connecting up to 2
readers, EU power cable

2 x Power supply cable
to reader, 24 V, 5 m
2 x Industrial ETHERNET cable, 5 m
2 x Antenna cable, 5 m

Application: Identification of similar goods in conveyor systems; local reaction to read events



- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SIMATIC RF600 RFID system PROFINET

2 x	UHF RFID reader RF615R ETSI with internal antenna	6GT2811-6CC10-0AA0
2 x	UHF RFID antenna RF642A	6GT2812-1GA08
4 x	Mounting for RF600 readers and antennas	6GT2890-2AB10
1 x	Wide-range power supply for connecting 2 RF600 readers	6GT2898-0AC81
1 x	Power cable for wide-range power supply	6GT2898-0AC01
2 x	Power supply cable for RF600 reader, 24 V, 5 m	6GT2891-0PH50
2 x	Industrial ETHERNET line, M12, RJ45, 5 m	6XV1871-5TH50
2 x	Antenna cable UHF RFID, 5 m, trailing	6GT2815-2BH50
20 x	UHF RFID transponder RF645T, mountable directly on metal	6GT2810-2HC05
20 x	Mounting cover for RF645T	6GT2898-5AA00

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6GT2811-6CC10-0XB0

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

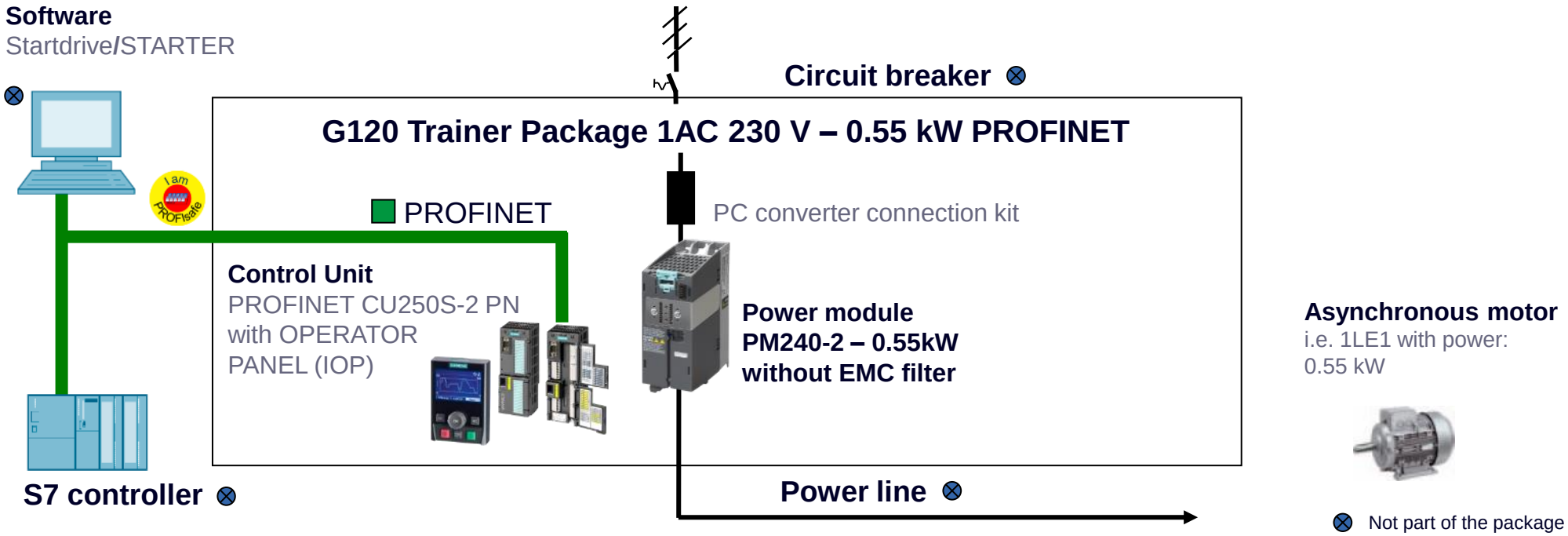
Drive technology
Overview

Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SINAMICS G120 standard drive for 230V AC single-phase with PROFINET	1			6SL3200-3AX00-0UL1	○
SINAMICS G120 standard drive for 400V AC three-phase with PROFINET	1			6SL3200-3AX00-0UL2	○
SINAMICS S210 servo drive for 1AC 200 - 240V with PROFINET, S7-1500	1			6SL3080-8BB00-0AA0	NEW ○
SINAMICS S210 servo drive for 3AC 380 - 480V with PROFINET, S7-1500	1			6SL3080-8BE00-0AA0	NEW ○
SINAMICS S120 servo drive for 230 V AC single-phase with PROFINET	1			6SL3080-8AB01-0AA0	○
SINAMICS S120 servo drive for 400 V AC three-phase with PROFINET	1			6SL3080-8AE01-0AA0	○

○ Relevant Information: https://support.industry.siemens.com/cs/de/en/view/65601780

SIEMENS

SINAMICS G120 standard drive 1 AC 230 V



System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	See slides below
Order number:	6SL3200-3AX00-0UL1

Note: Your local technical consultant will support you in selecting a motor

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SINAMICS G120 standard drive 1 AC 230 V

1 x	SINAMICS power module PM240-2 unfiltered with integrated braking chopper 200-240 V 1/3AC+10/-10% 47-63Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C; power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20 without control unit and operating unit released as of CU firmware V4.6	6SL3210-1PB13-8UL0
1 x	SINAMICS G120 Control Unit CU250S-2 PN integrated; PROFINET support of vector control, easy positioning EPOS via extended function license; 4 configurable DI/DQ, 6 DI (3 F-DI), 5 DI, 3 DQ (1 F-DQ), 2 AI, 2 AQ; Safety Integrated STO, SBC, SS1 further safety functions via extended safety license encoder: D-CLIQ + HTL/TTL/SSI, resolver/HTL VIA terminal protection IP20 USB and SD/MMC interface	6SL3246-0BA22-1FA0
1 x	SINAMICS SD CARD 512 MB empty	6SL3054-4AG00-2AA0
1 x	SINAMICS G120 shield connection kit 4 incl. shield plate and mounting elements for control units CU250S-2 variant: USS, CAN, DP, PN	6SL3264-1EA00-0LA0
1 x	SINAMICS G Intelligent Operator Panel IOP-2 for SINAMICS G120, G120P G110M, G110D, G120D, G120C ET 200PRO FC-2	6SL3255-0AA00-4JA2
1 x	SINAMICS G120 PC inverter connection kit 2 3 m USB cable for control units CU230P-2, CU240B-2, CU240E-2, CU250S-2 G110M and SINAMICS G120C	6SL3255-0AA00-2CA0
1 x	SINAMICS License Safety Integrated extended functions for memory card	6SL3074-0AA10-0AA0
1 x	SINAMICS G120 license extended functions for CU250S-2 VECTOR memory card for functionality: EPos	6SL3074-7AA04-0AA0

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SINAMICS G120 standard drive 1 AC 230 V
Optional motors

SIMOTICS GP Low-voltage motor without encoder — 1LE1003-0DB22-2AB4

SIMOTICS GP motor type: 1AV3082B Low-voltage motor, IEC squirrel-cage rotor, self-ventilated, IP55, temp. class 155(F) to 130(B), aluminum housing, premium efficiency, 4-pin, * FS80M * 0.55kW (50Hz) 0.63kW (60Hz) 3 AC 50Hz 230VD/400VY * 3 AC 60Hz 460VY IM B 3, motor protection, 1 PTC thermistors for shutdown, terminal box at top

SIMOTICS GP Low-voltage motor with HTL encoder — 1LE1003-0DB22-2AB4-Z G11

SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class 155(F) according to 130(B); aluminum enclosure; premium efficiency, 4-pin * frame size 80M * 0.55 kW (50 Hz) 0.63 kW (60 Hz),if no order code is specified for selecting another color. 3 AC 50 Hz 230 VD/400 VY * 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown terminal box at top G11=Built-on encoder 1XP8012-10 (HTL) 1024 pulses, with external fan (F70) 1XP8032-10 is used

SIMOTICS GP Low-voltage motor with TTL encoder — 1LE1003-0DB22-2AB4-Z G12

SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class 155(F) according to 130(B) aluminum enclosure premium efficiency, 4-pin * frame size 80M * 0.55 kW (50 Hz) 0.63 kW (60 Hz) 3 AC 50 Hz 230 VD/400 VY * 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown Terminal box at top G12=Built-on encoder 1XP8012-20 (TTL) 1024 pulses, with external fan (F70) 1XP8032-20 is used

SIEMENS

SINAMICS G120 standard drive 1 AC 230 V
Optional software

STARTER 6SL3072-0AA00-0AG0
Commissioning tool for SINAMICS and MICROMASTER version V5.4 SP2

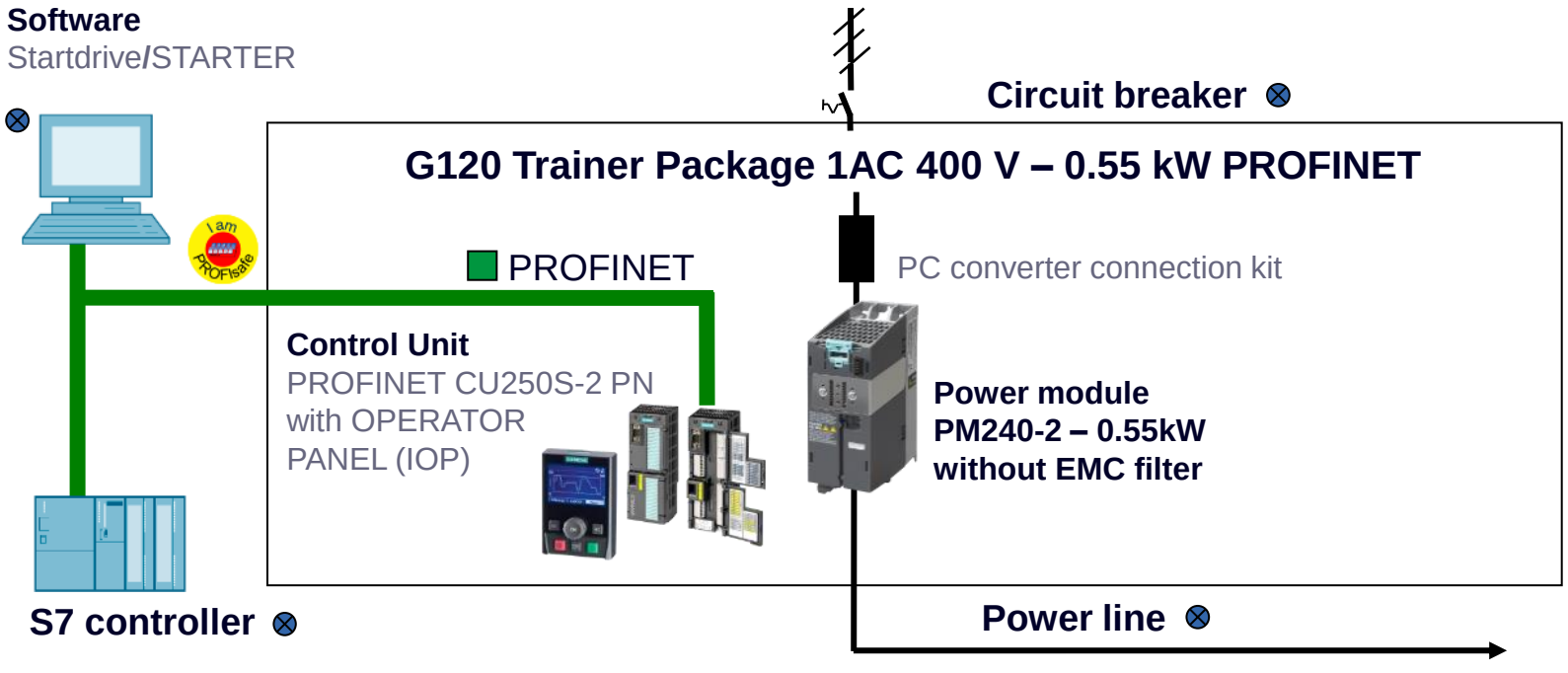
STARTDRIVE 6SL3072-4FA02-0XA0
Engineering and commissioning tool for SINAMICS version 17

SIZER 6SL3070-0AA00-0AG0
Configuration tool for Siemens drives

Note: STARTDRIVE is contained in the Trainer Package SIMATIC STEP 7 Professional Software for Training, see →

SIEMENS

SINAMICS G120 standard drive 3 AC 400 V



Asynchronous motor
i.e. 1LE1 with power:
0.55 kW

⊗ Not part of the package

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	See slides below
Order number:	6SL3200-3AX00-0UL2

Note: Your local technical consultant will support you in selecting a motor

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SINAMICS G120 standard drive 3 AC 400 V

1 x	SINAMICS Power Module PM240-2 unfiltered with integrated braking chopper 380-480 V 3 AC +10/-10% 47-63 Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C; power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20 without control unit and operating unit released as of CU firmware version V4.6	6SL3210-1PE12-3UL1
1 x	SINAMICS G120 Control Unit CU250S-2 PN, integrated PROFINET supports vector control, basic positioner EPos via Extended Function license, 4 configurable DI/DO, 6 DI (3 F-DI), 5 DI, 3 DO (1 F-DQ), 2 AI, 2 AO Safety Integrated STO, SBC, SS1, further safety functions via Extended Function license, encoder: D-CLiQ + HTL/TTL/SSI, resolver/HTL via terminal protection IP20, USB and SD/MMC interface	6SL3246-0BA22-1FA0
1 x	SINAMICS SD CARD 512 MB empty	6SL3054-4AG00-2AA0
1 x	SINAMICS G120 shield connection kit 4 incl. shield plate and mounting elements for control units CU250S-2 variant: USS, CAN, DP, PN	6SL3264-1EA00-0LA0
1 x	SINAMICS G Intelligent Operator Panel IOP-2 for SINAMICS G120, G120P G110M, G110D, G120D, G120C ET 200PRO FC-2	6SL3255-0AA00-4JA2
1 x	SINAMICS G120 PC inverter connection kit 2 3 m USB cable for control units CU230P-2 CU240B-2, CU240E-2, CU250S-2 G110M and SINAMICS G120C	6SL3255-0AA00-2CA0
1 x	SINAMICS License Safety Integrated extended functions for memory card	6SL3074-0AA10-0AA0
1 x	SINAMICS G120 license extended functions for CU250S-2 Vector memory card for functionality: EPos	6SL3074-7AA04-0AA0

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SINAMICS G120 standard drive 3 AC 400 V
Optional motors

SIMOTICS GP Low-voltage motor without encoder — 1LE1003-0DB22-2AB4

SIMOTICS GP motor type: 1AV3082B Low-voltage motor, IEC squirrel-cage rotor, self-ventilated, IP55, temp. class 155(F) to 130(B), aluminum housing, premium efficiency, 4-pin, * FS80M * 0.55kW (50Hz) 0.63kW (60Hz) 3 AC 50Hz 230VD/400VY * 3 AC 60Hz 460VY IM B 3, motor protection, 1 PTC thermistors for shutdown, terminal box at top

SIMOTICS GP Low-voltage motor with HTL encoder — 1LE1003-0DB22-2AB4-ZG11

Z= G01 with HTL encoder SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class 155(F) according to 130(B); aluminum enclosure; premium efficiency, 4-pin * frame size 80M * 0.55 kW (50 Hz) 0.63 kW (60 Hz), 3 AC 50 Hz 230 VD/400 VY * 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown, G01 = Built-on encoder 1XP8012-10 (HTL) 1024 pulses, with external fan (F70) 1XP8032-10 is used

SIMOTICS GP Low-voltage motor with TTL encoder — 1LE1003-0DB22-2AB4-ZG12

SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class 155(F) according to 130(B) aluminum enclosure premium efficiency, 4-pin * frame size 80M * 0.55 kW (50 Hz) 0.63 kW (60 Hz), 3 AC 50 Hz 230 VD/400 VY * 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown, terminal box at top G02=Built-on encoder 1XP8012-20 (TTL) 1024 pulses, with external fan (F70) 1XP8032-20 is used

SINAMICS G120 standard drive 3 AC 400 V
Optional motors

STARTER
Commissioning tool for SINAMICS and MICROMASTER version V5.4 SP2

6SL3072-0AA00-0AG0

STARTDRIVE
Engineering and commissioning tool for SINAMICS version 17

6SL3072-4FA02-0XA0

SIZER
Configuration tool for Siemens drives

6SL3070-0AA00-0AG0

Note: STARTDRIVE is contained in the Trainer Package SIMATIC STEP 7 Professional Software for Training, see →

SIEMENS

SINAMICS S210 servo drive 1 AC 230 V

1 x	SINAMICS S210 SD card 512 MB incl. licensing (Certificate of License) V5.2 HF7 F01: 1 X Safety license DBSI	6SL3054-4FC00-2BA0-Z F01
1 x	Single cable connection prefabricated 4G0.75+2x0.5+4x0.2 C Speed connect connector; M17 cores with end sleeve; Data cable with IX connector UL/CSA DESINA MOTION-CONNECT 500 Dmax=10.5 mm, length(m)= 0 + 0 + 2 + 0	6FX5002-8QN08-1AC0
1 x	SIMOTICS S-1FK2 HD servo motor M0=1.27 Nm; PN = 0.6 kW at nN=6000 rpm (380-480 V); PN = 0.4 kW at nN=3000 rpm (200-240 V); with holding brake; degree of protection IP64; shaft D19x40 mm with feather key; absolute encoder 22-bit + 12-bit multi-turn (encoder AM22DQC); with OCC interface; Connector size M17, rotatable;	1FK2104-4AK10-1MA0
1 x	SINAMICS S210 input voltage: 200-240V 1AC; -10%/+10%; 5.0A; 45-66Hz; output voltage: 0-input V; 2.4A; 0-550 Hz; motor: 0.4 kW; degree of protection: IP20; frame size B; 55 x 170 x 170 (WxHxD)	6SL3210-5HB10-4UF0

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Order number:	6SL3080-8BB00-0AA0

Core product for vocational World Cup Industrial Control ↗

worldskills

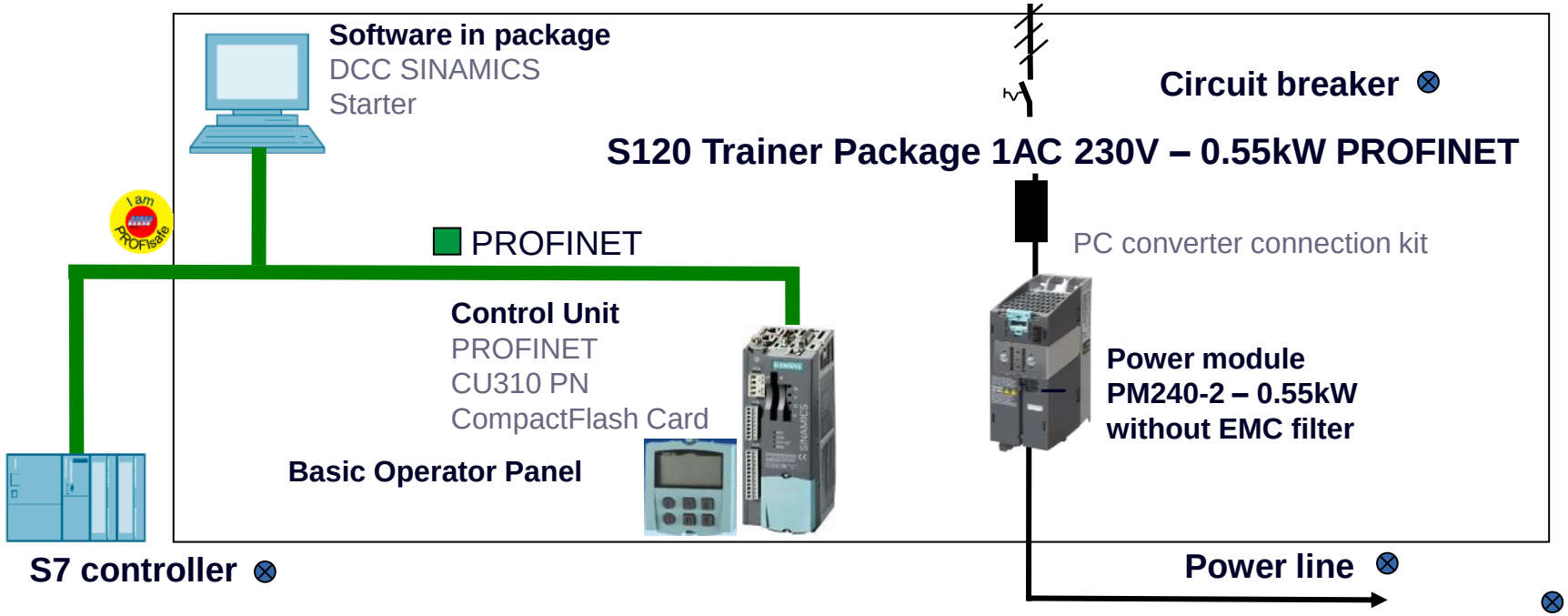
- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SINAMICS S210 servo drive 3 AC 400 V

1 x	SINAMICS S210 SD card 512 MB incl. licensing (Certificate of License) V5.2 HF7 F01: 1 X SAFETY LICENSE DBSI;	6SL3054-4FC00-2BA0-Z F01
1 x	Single cable connection prefabricated 4G0.75+2x0.5+4x0.2 C SPEED-CONNECT connector; M17 cores with end sleeve; data cable with IX connector; UL/CSA DESINA MOTION-CONNECT 500 Dmax=10.5 mm, length(m)= 0 + 0 + 2 + 0	6FX5002-8QN08-1AC0
1 x	SIMOTICS S-1FK2 HD servo motor M0=1.27 Nm; PN = 0.4 kW at nN=3000 rpm (380-480 V); PN = 0.2 kW At nN=1500 rpm (200-240 V); With holding brake; Degree of protection IP64; Shaft D19x40 mm with feather key; Absolute encoder 22-bit + 12-bit multi-turn (encoder AM22DQC); With OCC interface; Connector size M17, rotatable;	1FK2104-4AF10-1MA0
1 x	SINAMICS S210 input voltage: 200-480 V 3AC; -10%/+10%; 1.6 A; 45-66 Hz; output voltage: 0-input V 1.2 A; 0-550 Hz; motor: 0.4 kW; degree of protection: IP20; frame size A; 50 x 270 x 220 (WxHxD)	6SL3210-5HE10-4UF0

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Order number:	6SL3080-8BE00-0AA0

SINAMICS S120 servo drive 1 AC 230 V



Asynchronous motor
i.e. 1LE1
with power: 0.55 kW

Servo motor ⊗
e.g. 1FK7..

⊗ Not part of the package

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6SL3080-8AB01-0AA0

Note: Your local technical consultant will support you in selecting a motor

SIEMENS

SINAMICS S120 servo drive 1 AC 230 V

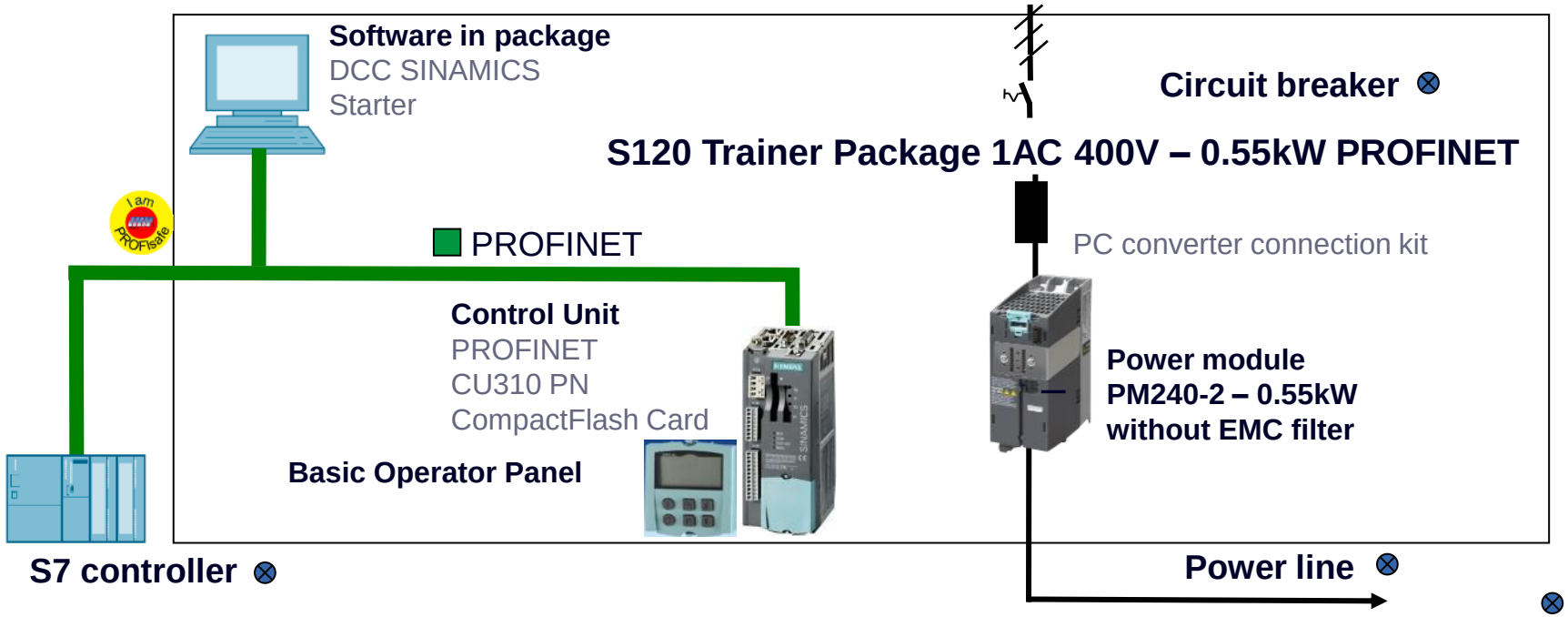
1 x	SINAMICS power module PM240-2 unfiltered with integrated braking chopper 200-240 V 1/3AC+10/-10% 47-63Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C; power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20 without control unit and operating unit, released as of CU firmware V4.6	6SL3210-1PB13-8UL0
1 x	SINAMICS S120 Control Unit CU310-2 PN with PN interface without CompactFlash card	6SL3040-1LA01-0AA0
1 x	SINAMICS S120 CompactFlash card without performance extension including Certificate of License V5.1 F01: 1 x License Safety Integrated extended functions	6SL3054-0FB00-1BA0-Z:F01
1 x	SINAMICS S120 Basic Operator Panel BOP20 for electronic controls, 6 keys for parameter setting and diagnostic information, suitable for control units CU305, CU310, CU320	6SL3055-0AA00-4BA0
1 x	Software on DVD: STARTER commissioning tool for SINAMICS and MICROMASTER V5.1 SP1 DVD for Windows Server 2008 R2 SP1 (64-bit), Windows 10 pro/Enterprise (64-bit), Windows 7 (64-bit) Windows 10 Enterprise 2016 LTSB, 2019 LTSC de, en, es, fr and it also includes all the SSP released SSPs	6SL3072-0AA00-0AG0
1 x	SINAMICS Engineering System SINAMICS DCC V3.1 SP1, full license DCC for SINAMICS option for STARTER V5.1 SP1, delivery on DVD, incl. floating license	6AU1810-1HA31-1XA0

SINAMICS S120 servo drive 1 AC 230 V
Optional hardware and software

Power supply SITOP PSU6200 24 V/20 A stabilized power supply input: 120 - 230 V AC (110 - 240 V DC) output: 24 V DC/20 A with diagnostic interface	6EP3336-7SB00-3AX0
Cable SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
Terminal module TM31 IO expansion For the SINAMICS S120; 12 DI, 2 DQ, 2 AI, 2 AQ	6SL3055-0AA00-3AA1
Terminal module TM54F Safety IO For devices S120; fail-safe digital inputs and outputs	6SL3055-0AA00-3BA0
Signal line DRIVE-CLiQ cable IP20/IP20 length: 0.95 meters	6SL3060-4AA10-0AA0
SIZER Configuration tool for Siemens drives	6SL3070-0AA00-0AG0

SIEMENS

SINAMICS S120 servo drive 3 AC 400 V



Asynchronous motor
i.e. 1LE1
with power: 0.55 kW

Servo motor
e.g. 1FK7..

Not part of the package

System requirements:	WIN10 (64-bit) Home and Prof. and Enterprise 1909, 2004, 20H2 / IoT Enterprise 2016 LTSB / 2019 LTSC
Sales note:	Schools, colleges and universities, for in-house vocational training departments
Technical note:	None available
Order number:	6SL3080-8AE01-0AA0

Note: Your local technical consultant will support you in selecting a motor

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

SINAMICS S120 servo drive 3 AC 400 V

1 x	SINAMICS power module PM240-2 unfiltered with integrated braking chopper 380-480 V 3 AC +10/-10% 47-63 Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C; power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20, without control unit and operating unit, released as of CU firmware V4.6	6SL3210-1PE12-3UL1
1 x	SINAMICS S120 Control Unit CU310-2 PN with PN interface without CompactFlash card	6SL3040-1LA01-0AA0
1 x	SINAMICS S120 CompactFlash card without performance extension including Certificate of License V5.1 F01: 1 x License Safety Integrated extended functions	6SL3054-0FB00-1BA0-Z:F01
1 x	SINAMICS S120 Basic Operator Panel BOP20 for electronic controls, two-line display, 6 keys for parameter setting and diagnostic information, suitable for control units CU305, CU310, CU320	6SL3055-0AA00-4BA0
1 x	Software on DL-DVD: STARTER commissioning tool for SINAMICS and MICROMASTER V5.1 SP2 HF1 DL-DVD for Windows Server 2016, 2019 (64-bit) Windows 10 pro/Enterprise (64-bit) Windows 10 Enterprise 2016 LTSB, 2019 LTSC de, en, es, fr and it also includes all SSPs released by the SSP	6SL3072-0AA00-0AG0
1 x	SINAMICS Engineering System SINAMICS DCC V3.1 SP1, full license DCC for SINAMICS, option for STARTER V5.1 SP1, delivery on DVD, including floating license	6AU1810-1HA31-1XA0

SINAMICS S120 servo drive 3 AC 400 V
Optional hardware and software

Power supply SITOP PSU6200 24 V/20 A stabilized power supply input: 120 - 230 V AC (110 - 240 V DC) output: 24 V DC/20 A with diagnostic interface	6EP3336-7SB00-3AX0
Cable SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
Terminal module TM31 IO expansion For the SINAMICS S120; 12 DI, 2 DQ, 2 AI, 2 AQ	6SL3055-0AA00-3AA1
Terminal module TM54F Safety IO For devices S120; fail-safe digital inputs and outputs	6SL3055-0AA00-3BA0
Signal line DRIVE-CLiQ cable IP20/IP20 length: 0.95 meters	6SL3060-4AA10-0AA0
SIZER Configuration tool for Siemens drives	6SL3070-0AA00-0AG0

SIEMENS

SinuTrain software
Overview

Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SinuTrain SINUMERIK Operate V4.5/V4.7/V4.8/V4.9 **siemens.com/sinutrain-downloads**		**Basic version**		No time limit	**NEW**
SinuTrain Trainer Package for SINUMERIK Operate		**6+40**	**V4.9**	MCS5370 / 6FC5870-1TC46-0YA0	**NEW ★**
SinuTrain student licenses for SINUMERIK Operate – 300 hours		**20**	**V4.9**	MCS5360 / 6FC5870-1SC46-0YA0	**NEW ★**
SinuTrain Trainer Package for SINUMERIK Operate		**6+40**	**V4.8**	MCS40552 / 6FC5870-1TC45-0YA0	**NEW ★**
SinuTrain student licenses for SINUMERIK Operate – 300 hours		**20**	**V4.8**	MCS40573 / 6FC5870-1SC45-0YA0	**NEW ★**
SinuTrain Trainer Package for SINUMERIK Operate		**6+40**	**V4.7**	MCS4055 / 6FC5870-1TC43-0YA0	**NEW ★**
SinuTrain student licenses for SINUMERIK Operate – 300 hours		**20**	**V4.7**	MCS4057 / 6FC5870-1SC43-3YA0	**NEW ★**
SinuTrain Trainer Package for SINUMERIK Operate		**6+40**	**V4.5**	MCS40551 / 6FC5870-1TC41-0YA0	**NEW ★**
SinuTrain student licenses for SINUMERIK Operate – 300 hours		**20**	**V4.5**	MCS40571 / 6FC5870-1SC41-0YA0	**NEW ★**

SinuTrain software

- In Sales by SISW MC Sales only with Maintenance.
  Order no. MCS**** → Requests for offers should be sent to: **mcmts.software.plm@siemens.com**
- In Sales by Siemens Sales without Maintenance.
  Article number 6FC5870-1 → Requests for offers should be sent to Standard Siemens Sales

★ Only for schools, colleges and universities

SIEMENS

Download
SinuTrain for SINUMERIK Operate V4.5/V4.7/V4.8/V4.9 – Basic

The SinuTrain offline programming station brings SINUMERIK Operate, including animated machine control panel, to the PC to create a training situation that is very similar to reality thus facilitating easy transition from a training environment to a practical environment. This powerful tool allows NC programs to be programmed offline on a PC in an environment that is close to reality; these NC programs can then be directly transferred to the CNC.

Using SINUMERIK Operate and the original SINUMERIK CNC kernel, all operating and programming operations can be used and CNC programs executed without any restrictions. SinuTrain for SINUMERIK Operate V4.5/V4.7/V4.8/V4.9 - Basic is based on the respective SINUMERIK CNC firmware.

The control-identical NC programming station – as a basic version with no time limit – available as a free download.

System requirements:	See siemens.com/sinutrain-downloads
Sales note:	Schools, colleges and universities, not for in-house vocational training departments
Technical note:	Basic version – with no time limit
Order number:	Download siemens.com/sinutrain-downloads

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Academic Bundle –
SinuTrain for SINUMERIK Operate V4.9

6 x license for **SinuTrain Operate V4.9**

1 Package
Full Licenses

2 x 20 license for **SinuTrain Student Package Operate V4.9** – **for students**
Software subject to time limit of 300 hours with authorization

2 Packages
Student Licenses
MCS5360/
6FC5870-1SC46-0YA0

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software.
The costs are incurred annually.

System requirements:	Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8
Order number:	MCS5370 (incl. Maintenance) 6FC5870-1TC46-0YA0 (without Maintenance)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Academic Bundle –
Student Package for SinuTrain SINUMERIK Operate V4.9

1 x 20 license for **SinuTrain Operate V4.9** – **for students**
Software subject to time limit of 300 hours with authorization

1 Package
Student Licenses

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software.
The costs are incurred annually.

System requirements:	Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)	
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com	
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8	
Order number:	MCS5360 (incl. Maintenance)	6FC5870-1SC46-0YA0 (without Maintenance)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Academic Bundle –
SinuTrain for SINUMERIK Operate V4.8

6 x license for **SinuTrain Operate V4.8**

1 x 20 license for **Operate V4.8** – **for students**
Software subject to time limit of 300 hours with authorization

1 Package
Full Licenses

2 Packages
Student Licenses
MCS40573/
6FC5870-1SC45-0YA0

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software.
The costs are incurred annually.

System requirements:	Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported) Windows 8.1 (32-bit and 64-bit; RT Edition is not supported) Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CH, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8
Order number:	MCS40552 (incl. Maintenance) 6FC5870-1SC45-0YA0 (without Maintenance)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Academic Bundle –
Student Package for SinuTrain SINUMERIK Operate V4.8

1 x 20 license for **SinuTrain Operate V4.8** – **for students**
Software subject to time limit of 300 hours with authorization

6FC5870-1SC45-0YA0

1 Package
Student Licenses

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software.
The costs are incurred annually.

System requirements:	Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported) Windows 8.1 (32-bit and 64-bit; RT Edition is not supported) Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8
Order number:	MCS40573 (incl. Maintenance) 6FC5870-1SC45-0YA0 (without Maintenance)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Academic Bundle –
SinuTrain for SINUMERIK Operate V4.7

6 x license for **SinuTrain Operate V4.7**

1 Package
Full Licenses

2 x 20 license for **SinuTrain Operate V4.7** – **for students**
Software subject to time limit of 300 hours with authorization

2 Packages
Student Licenses
MCS4057/
6FC5870-1SC43-0YA0

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software.
The costs are incurred annually.

System requirements:	Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported) Windows 8.1 (32-bit and 64-bit; RT Edition is not supported) Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.7 SP4
Order number:	MCS4055 (incl. Maintenance) 6FC5870-1TC43-0YA0 (without Maintenance)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Academic Bundle –
Student Package for SinuTrain SINUMERIK Operate V4.7

1 x 20 license for **SinuTrain Operate V4.7** – **for students**
Software subject to time limit of 300 hours with authorization

6FC5870-1SC43-3YA0

1 Package
Student Licenses

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements:	Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported) Windows 8.1 (32-bit and 64-bit; RT Edition is not supported) Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.7 SP4
Order number:	MCS4057 (incl. Maintenance) 6FC5870-1SC43-3YA0 (without Maintenance)

SIEMENS

Academic Bundle –
SinuTrain for SINUMERIK Operate V4.5

6 x license for **SinuTrain Operate V4.5**

1 Package
Full Licenses

2 x 20 license for **SinuTrain Operate V4.5** – **for students**
Software subject to time limit of 300 hours with authorization

2 Packages
Student Licenses
MCS40571/
6FC5870-1SC41-0YA0

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software.
The costs are incurred annually.

System requirements:	Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported) Windows 8.1 (32-bit and 64-bit; RT Edition is not supported) Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.5
Order number:	MCS40551 (incl. Maintenance) 6FC5870-1TC41-0YA0 (without Maintenance)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Academic Bundle –
Student Package for SinuTrain SINUMERIK Operate V4.5

1 x 20 license for **SinuTrain Operate V4.5** – **for students**
Software subject to time limit of 300 hours with authorization

6FC5870-1SC41-0YA0

1 Package
Student Licenses

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

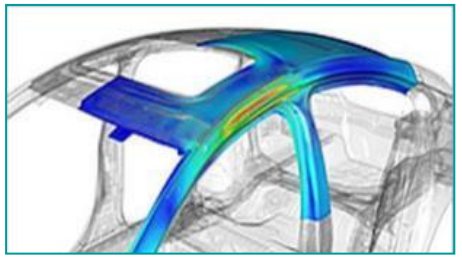
Maintenance
Basic maintenance services. The software maintenance services include software updates and phone support for the software.
The costs are incurred annually.

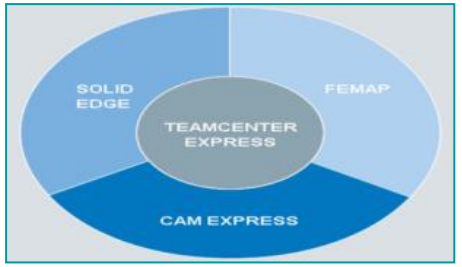
System requirements:	Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported) Windows 8.1 (32-bit and 64-bit; RT Edition is not supported) Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)
Sales note:	Schools, colleges and universities, not for in-house vocational training departments Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW) or only without Maintenance For quotation requests in general, send email to: mcmts.software.plm@siemens.com
Technical note:	Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.5
Order number:	MCS40571 (incl. Maintenance) 6FC5870-1SC41-0YA0 (without Maintenance)

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Siemens Product Lifecycle Management (PLM) Software





PLM software

↗ NX, offers modern tools and technologies for product development. The latest version contains functions for increasing productivity in design, simulation and manufacturing.

↗ Tecnomatix, software for the "Digital factory", offers highly functional solutions for the entire scope of the life cycle of your products with which companies can quickly find the best strategies for increasing productivity and reducing costs in manufacturing.

↗Teamcenter, supports bringing increasingly complex products to the market throughout the entire product life cycle, with simultaneous increases in productivity and optimized worldwide cooperation.

Velocity Series, a family of modular, pre-integrated software solutions for product life cycle management in small and medium-sized manufacturing companies.
The 2D/3D CAD software Solid Edge is a component of this software.
↗ Solid Edge Highschool ↗ Solid Edge students ↗ Solid Edge Academic

Contact partner

NX MCD software - In DE/AT/CH contact mediation via SCE promoters

All other countries: www.siemens.com/plm/gaf

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Partnership with WorldSkills

WorldSkills (WS) has been increasing the quality of vocational training for > 60 years

Since 2010, Siemens has been a global industry partner and product sponsor and provides the competitors for the WorldSkills competitions disciplines industrial control, electrical installations, polymechanics/automation and manufacturing team challenge with automation products, such as SIMATIC S7-1500 and LOGO!.

Every two years, a world championship with > 1,000 competitors
and > 200,000 visitors takes place.
London 2011, Leipzig 2013, São Paulo 2015, Abu Dhabi 2017, Kazan 2019, Shanghai 2022 …

Core product for vocational World Cup Industrial Control ↗

↗ WorldSkills

Siemens supports the world championships as well as selected continental/regional competitions.

Global Industry Partner

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

Important ordering information

A specific end use agreement is required to purchase Trainer Packages

This additional supplementary agreement for classroom use of SIMATIC software at research, development and training institutions must be signed by the respective educational institution and sent to Siemens.
Trainer Packages are released for delivery by SIEMENS AG, SCE Team global: fax: 49 (0)911-958-29105, email
Siemens contact partners can find this declaration on the SCE Intranet ↗ Additional agreement.

A separate release/ordering process applies to the following products:

SinuTrain:.

- Sold only with Maintenance in DE/AT/CN/US/IT/TW → Order number MCS405...
  To request a quotation – send email to: mcmts.software.plm@siemens.com
- Sold without Maintenance in all other countries → Order number 6FC5870-1...
  To request a quotation – contact Siemens Standard Sales

The following Trainer Packages can only be ordered from schools, colleges and universities:

• STEP 7 Professional and WinCC Advanced V17 SW **for students**	6ES7822-1AC07-4YA5
• SIMATIC CFC software **for students**	6ES7658-1EX58-0YS6
• SIMOTION SCOUT SW **for students**	6AU1810-1BE5_-1YA5 in preparation
• SinuTrain Operate	6FC5870-1T… /MCS405…
• SinuTrain Operate **for students**	6FC5870-1S… /MCS405…

- IOT2000
- Industrial Controls
- Engineering SW
- Process Automation
- SIMIT Simulation
- Basic Automation
- SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Industrial Communication
- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

SIEMENS

You can find additional information at SCE on the Internet

Siemens Automation Cooperates with Education (SCE)

Teach and learn what matters! The digital transformation is in full swing. SCE provides educators with a comprehensive offering to convey industry 4.0/automation knowledge for academia and in-house vocational training, which can also be used by learners for self-study.

For educators in industrial automation

› SCE Support Finder

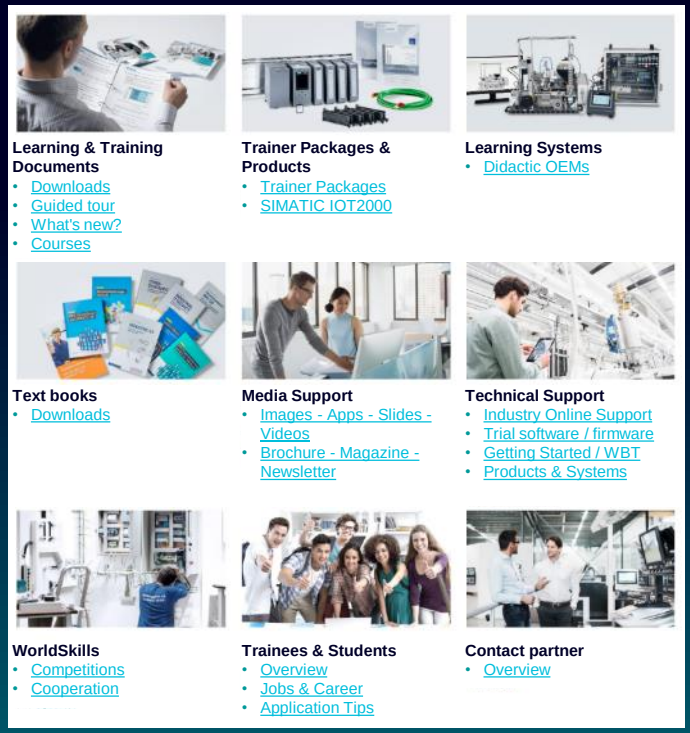
All SCE offers for trainees and students at a glance

Are you an trainee or student wanting to improve your knowledge on automation and Industry 4.0, and are you looking for an exciting traineeship, internship or job (alongside your studies)?
Then we have just what you need – on our "Trainees and Students" page, you will find everything you require to delve deeper into the industrial world of tomorrow:

- Learning material for targeted improvement of training- or study-relevant knowledge
- Industrial software for trying out and for practical exercises
- Offers for jobs and internships alongside your training or studies

Take a look and expand your knowledge or apply!

› Find out more



Comprehensive support for educators and students on the way to Industry 4.0

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

All product designations may be trademarks or other rights of Siemens AG, its affiliated companies or other companies whose use by third parties for their own purposes could violate the rights of the respective owner.

siemens.com/sce