

# Precision 5530



## Physical specifications

**Table 3. Dimensions and weight**

Height	17 mm (0.66 in)
Width	357 mm (14.06 in)
Depth	235 mm (9.26 in)
Weight	1.78 kg (3.93 lb) - Non Touch / 2.04 kg (4.5 lb) - Touch

## System information

**Table 4. System information**

Chipset	Intel CM246
DRAM bus width	64-bit wide channels
FLASH EPROM	32 MB
PCIe bus	up to Gen3; 8 Gbps

## Processor specifications

**NOTE:** Processor numbers are not a measure of performance. Processor availability is subject to change and may vary by region/country.

**Table 5. Processor specifications**

Type	UMA Graphics
Intel Xeon E-2176M (6-core 2.7GHz, 4.4GHz Turbo, 12MB 45W)	Intel UHD Graphics P630
Intel 8th generation Intel Core i9-8950HK,(6-core 2.9GHz, 4.8GHz Turbo, 12MB 45W)	Intel UHD Graphics 630
Intel 8 th generation Intel Core i7-8850H (6-core 2.6GHz, 4.3GHz Turbo, 9MB 45W)	Intel UHD Graphics 630
Intel 8 th generation Intel Core i5-8300H (4-core 2.3GHz, 4.0GHz Turbo, 8MB 45W)	Intel UHD Graphics 630

## Operating system specifications

**Table 6. Operating system specifications**

Operating systems supported	<ul style="list-style-type: none"><li>• Microsoft 10 Windows Pro 64-bit</li><li>• Microsoft Windows 10 Home 64-bit</li><li>• Microsoft Windows 10 Pro National Academic (64-bit)</li><li>• Microsoft Windows 10 Home National Academic (64-bit)</li><li>• Microsoft Windows 10 Pro for Enterprise</li><li>• Microsoft windows 10 Pro for Workstation (64-bit)</li><li>• Red Hat Enterprise Linux (RHEL)</li><li>• Ubuntu 16.04 LTS SP1 64-bit</li></ul>
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## Memory specifications

**Table 7. Memory specifications**

Minimum memory configuration	8 GB
Maximum memory configuration	32 GB

Number of slots	2 SoDIMM
Maximum memory supported per slot	16 GB
Memory options	<ul style="list-style-type: none"> <li>• 8 GB DDR4 2666 MHz (8Gx1)</li> <li>• 8 GB DDR4 2666 MHz (4Gx2)</li> <li>• 12 GB DDR4 2666 MHz (8Gx1 + 4Gx1)</li> <li>• 16 GB DDR4 2666 MHz (8Gx2)</li> <li>• 16 GB DDR4 2666 MHz (16Gx1)</li> <li>• 24 GB DDR4 2666 MHz (16Gx1 + 8Gx1)</li> <li>• 32 GB DDR4 2666 MHz (16Gx2)</li> </ul> <p> <span style="font-size: 1.2em; vertical-align: middle;">i</span> <b>NOTE: The memory modules are customer replaceable units (CRU), and it can be upgraded.</b> </p> <p> <span style="font-size: 1.2em; vertical-align: middle;">i</span> <b>NOTE:</b> <ul style="list-style-type: none"> <li>• Memory configuration of 2666 MHz pair with core i5, i7 and i9 CPU</li> </ul> </p>
Type	DDR4 SDRAM Non-ECC memory
Speed	2666 MHz on Core i5, i7 and i9 processor

## Port and connector specifications

**Table 8. Ports and connectors**

USB	<ul style="list-style-type: none"> <li>• Two USB 3.1 Gen 1 ports with PowerShare</li> <li>• One Thunderbolt 3 port (USB 3.1 Gen 2 Type-C) with power delivery</li> </ul>
Security	Noble lock slot
Audio	One headset port (headphone and microphone combo)
Video	HDMI 2.0 port
Memory Card reader	SD 4.0

## Communication specifications

**Table 9. Communication specifications**

Network adapter	Ethernet via USB-to-Ethernet Dongle provided in box.
Wireless	<ul style="list-style-type: none"> <li>• Intel Wireless-AC 9260 2x2 802.11ac + BT5.0 (vPro)</li> <li>• Qualcomm QCA6174A 2x2 802.11ac + BT5.0</li> <li>• Bluetooth 5.0</li> </ul>

# Video specifications

Table 10. Video

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel UHD Graphics 630	UMA	Intel Core i5 - 8300H Intel Core i7 - 8850 Intel Core i9 - 8950	Integrated	Shared system memory	HDMI 2.0	HDMI : 1920x1080@60Hz
Intel UHD Graphics P630	UMA	Intel Xeon E-2176M	Integrated	Shared system memory	HDMI 2.0	HDMI : 1920x1080@60Hz
NVIDIA Quadro P1000	Discrete	N/A	GDDR5	4 GB	HDMI 2.0	HDMI = 1920x1200 (PC Mode), 1920x1080 (TV mode, 1080p)
NVIDIA Quadro P2000	Discrete	N/A	GDDR5	4 GB	HDMI 2.0	HDMI = 1920x1200 (PC Mode), 1920x1080 (TV mode, 1080p)

# Audio specifications

Table 11. Audio specifications

Controller	Waves MaxxAudio Pro
Type	Integrated
Interface	<ul style="list-style-type: none"><li>High-quality speakers</li><li>Dual-array microphones</li></ul>

# Storage specifications

Table 12. Storage specifications

Type	Form factor	Interface	Capacity
Solid-State Drive (SSD)	M.2 PCIe SSD	PCIe, Up to 8 Gbps	256 GB upto 2 TB SSD
Hard drive (HDD)	2.5 inch SATA HDD	SATA , Up to 6 Gbps	500 GB / 1 TB/ 2 TB HDD

# Display specifications

**Table 13. Display specifications**

Type	<ul style="list-style-type: none"><li>• 15.6-inch UltraSharp FHD IPS (1920x1080) Wide View Anti-Glare LED-backlit with Premium Panel Guarantee (72% color gamut)</li><li>• 15.6-inch UltraSharp UHD IGZO (3840x2160) Touch Wide View LED-backlit with Premium Panel Guarantee (100% Minimum Adobe color gamut)</li></ul>
Luminance/Brightness (typical)	<ul style="list-style-type: none"><li>• 400 nits (FHD 72% color gamut )</li><li>• 360 nits (UHD Adobe 100% color gamut)</li></ul>
Height (Active area)	<ul style="list-style-type: none"><li>• FHD - 194.5 mm (7.66 inches)</li><li>• UHD - 194.5 mm (7.66 inches)</li></ul>
Width (Active area)	<ul style="list-style-type: none"><li>• FHD - 345.6 mm (13.61 inches)</li><li>• UHD - 345.6 mm (13.55 inches)</li></ul>
Diagonal	<ul style="list-style-type: none"><li>• FHD - 396.52 mm (15.61 inches)</li><li>• UHD - 396.52 mm (15.61 inches)</li></ul>
Megapixels	<ul style="list-style-type: none"><li>• FHD - 2.07</li><li>• UHD - 8.29</li></ul>
Pixels Per Inch (PPI)	<ul style="list-style-type: none"><li>• FHD - 141</li><li>• UHD - 282</li></ul>
Contrast ratio	<ul style="list-style-type: none"><li>• FHD - 1500:1</li><li>• UHD - 1500:1</li></ul>
Refresh rate	60 Hz
Horizontal viewing angle (min)	+/- 89 degrees
Vertical viewing angle (min)	+/- 89 degrees
Pixel pitch	<ul style="list-style-type: none"><li>• FHD - 0.18 mm</li><li>• UHD - 0.09 mm</li></ul>
Power consumption (max)	<ul style="list-style-type: none"><li>• 4.22 W (FHD 72% color gamut )</li><li>• 9.23 W (UHD Adobe 100% color gamut)</li></ul>

# Keyboard specifications

**Table 14. Keyboard specifications**

Number of keys	<ul style="list-style-type: none"><li>• 80 (U.S. and Canada)</li><li>• 81 (Europe)</li><li>• 82 (Brazil)</li><li>• 84 (Japan)</li></ul>
Size	Full sized <ul style="list-style-type: none"><li>• X= 19.05 mm key pitch</li><li>• Y= 18.05 mm key pitch</li></ul>
Backlit keyboard	Easy enable/disable via hotkey <Fn+F10 Key> variable brightness levels
Layout	QWERTY/AZERTY/Kanji

# Camera

**Table 15. Camera specifications**

Resolution	HD Camera: <ul style="list-style-type: none"><li>• Still image: 0.92 megapixels</li><li>• Video: 1280x720 at 30 fps</li></ul>
Diagonal viewing angle	<ul style="list-style-type: none"><li>• Camera - 66 degrees</li></ul>

# Touchpad specifications

**Table 16. Touchpad specifications**

Resolution	<ul style="list-style-type: none"><li>• Horizontal: 1952</li><li>• Vertical: 3220</li></ul>
Dimensions	<ul style="list-style-type: none"><li>• Width: 4.03 inches (102.40 mm )</li><li>• Height: 2.45 inches (62.40 mm)</li></ul>
Multi-touch	Support 5 fingers

# Power supply specifications

**Table 17. Power supply**

Input Voltage	100–240 VAC, 50–60 Hz
Input current (maximum)	<ul style="list-style-type: none"><li>130 W AC Adapter</li></ul>

## Battery

**Table 18. Battery specifications**

Type	<ul style="list-style-type: none"><li>56 WHr lithium-ion 3 cell battery</li><li>97 WHr lithium-ion 6 cell battery</li></ul>
Dimension	<ol style="list-style-type: none"><li>56 WHr lithium-ion<ul style="list-style-type: none"><li>Length: 223.2 mm (8.79 inch)</li><li>Width: 71.8 mm (2.83 inch)</li><li>Height: 7.2 mm (0.28 inch)</li><li>Weight: 250.00 g (0.55 lb)</li></ul></li><li>97 WHr lithium-ion<ul style="list-style-type: none"><li>Length: 332 mm (13.07 inch)</li><li>Width: 96.0 mm (3.78 inch)</li><li>Height: 7.7 mm (0.30 inch)</li><li>Weight: 450.00 g (0.992 lb)</li></ul></li></ol>
Weight (maximum)	450.00 g (0.992 lb)
Voltage	<ul style="list-style-type: none"><li>56 WHr - 11.4 VDC</li><li>97 WHr - 11.4 VDC</li></ul>
Life span	300 discharge/recharge cycles
Charging time when the computer is off (approximate)	4 hours
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions
Temperature range: Operating	0°C to 35°C (32°F to 95°F)
Temperature range: Storage	-40°C to 65°C (-40°F to 149°F)
Coin-cell battery	ML1220

# Power adapter

**Table 19. Power adapter specifications**

Type	130W adapter
Input Voltage	100 to 240 VAC
Adapter size	Height:22 mm (0.86 inches) Width:66 mm (2.59 inches) Depth:143 mm (5.62 inches)
Input frequency	50 Hz to 60 Hz
Output current	130 W - 6.67 A (continuous)
Rated output voltage	19.5 VDC
Temperature range (Operating)	0° to 40° C (32° to 104° F)
Temperature range (Non-Operating)	40° to 70° C (-40° to 158° F)

## Security

**Table 20. Security**

Security HW	Trusted Platform Module (TPM) 2.0 - Integrated on system board
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## Computer environment

**Airborne contaminant level:** G1 as defined by ISA-S71.04-1985

**Table 21. Computer environment**

	Operating	Storage
Temperature range	0°C to 40°C (32°F to 104°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	20% to 80% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)	2 to 600 Hz at 0.66 Grms	2 to 600 Hz at 1.3 Grms
Shock (maximum)	140 G with pulse duration of 2 msec +/- 5% (equivalent to 70 in/sec)	160 G with pulse duration of 2 msec +/- 5% (equivalent to 80 in/sec)
Altitude (maximum)	0 m to 3048 m (0 to 10,000 ft); 0° to 40°C (32° to 104°F)	0 m to 10668 m (0 to 35,000 ft)

\* Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse when the hard drive is in use.



‡ Measured using a 2 ms half-sine pulse when the hard-drive head is in parked position.

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