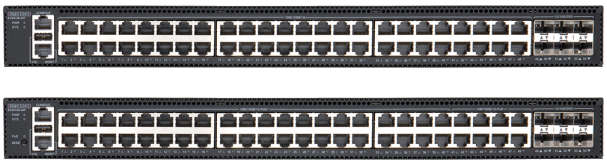
L2+/Lite L3 Gigabit Ethernet Switch

ECS4150-54T/ECS4150-54P



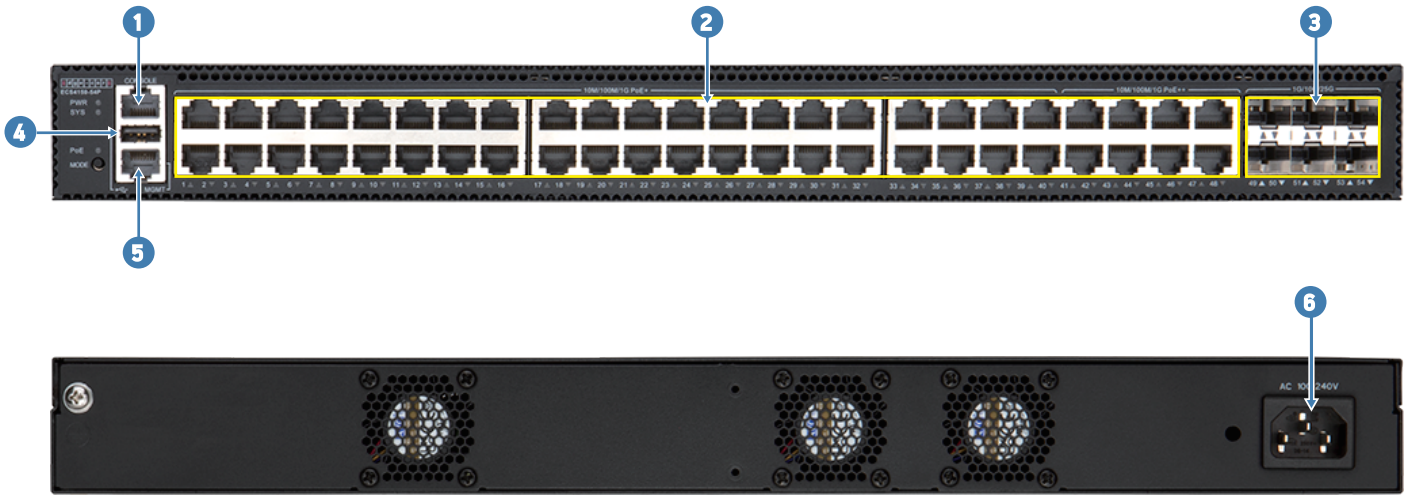
The Edgecore ECS4150-54T switch is a Gigabit Ethernet access switch with six 25G SFP28 uplinks. The switch is ideal as a high-performance Gigabit access switch with 1 Gigabit downlinks. This switch is also positioned as a cloud edge access switch, connecting IOT and other devices in enterprise and SMB deployments. It is also an ideal Gigabit access switch for SMB, enterprise, and campus networks.

The ECS4150-54P is a PoE switch that can provide up to 90 Watts to power devices such as wireless access points, VoIP phones, surveillance cameras, IoT devices etc. over Cat 5 UTP cable, eliminating the need for individual power sources. The ECS4150-54T/ECS4150-54P is packed with features that bring high availability, comprehensive security, robust multicast control, and advance QoS to the network edge, while maintaining simple management. The switch also supports the most advance IPv6 management, IPv6 security, and IPv6 multicast control in accordance with the growth of IPv6 deployment.

Key Features and Benefits

- Best price-performance Gigabit Ethernet access switch with 25G uplinks
- ITU-T G.8032 ERPS L2 Ring protection with <50ms convergence time
- Comprehensive and field-proven software features for ISPs/carriers, providing broadband access, IPTV services
- Enhanced security, IPv6, and multicast features
- Simple management (CLI, SNMP, Web, ecCLOUD, TIP OLS)
- Complete private MIB to fully control and monitor the switch via customer's EMS

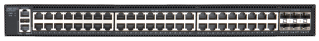
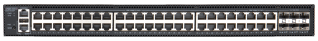
Interfaces



Description			
1.	RJ-45 management port	4.	USB management port
2.	48 x RJ-45 10/100/1000BASE-T ports (ECS4150-54T) 48 x RJ-45 10/100/1000BASE-T PoE ports (ECS4150-54P)	5.	RJ-45 console port
3.	6 x SFP28 25G uplink ports	6.	AC power input

Datasheet

L2+/Lite L3 Gigabit Ethernet Switch

	Product Model	ECS4150-54T	ECS4150-54P
	Product Image		
Port	RJ-45 10/100/1000BASE-T Ports	48	48
	SFP28 25G Uplink Ports	6	6
	RJ-45 Console Port	1	1
	USB port	1	1
Performance	Switching Capacity	396 Gbps	396 Gbps
	Forwarding Rate	295 Mpps	295 Mpps
	NAND Flash Memory	256 MB	256 MB
	DRAM	1 GB	1 GB
	MAC Address Table	32 K	32 K
	Jumbo Frames	10 KB	10 KB
	Auto-negotiation, Auto-MDI/MDIX	Yes	Yes
Mechanical	Dimension (W x D x H) mm	442 x 420 x 43.6	442 x 420 x 43.6
	Weight	4.7 W	5.5 W
Power Supply	AC 100-240 VAC, 50/60 Hz	Yes	Yes
	Max System Power Consumption (Watts)	52 W	835 W
PoE	IEEE 802.3af	X	Yes
	IEEE 802.3at	X	Yes
	IEEE 802.3bt	X	Yes
	Power budget	X	740 W
	Auto disable exceeding power budget	X	Yes
	Dynamic power allocation	X	Yes
Environmental	Operating Temperature	-5 ~ 45°C	-5 ~ 45°C
	Storage Temperature	-40 ~ 70°C	-40 ~ 70°C
	Operating Humidity (non-condensing)	5% to 95%	5% to 95%
	Storage Humidity (non-condensing)	5% to 95%	5% to 95%
	Environmental Regulation compliance: WEEE	Yes	Yes
	Environmental Regulation compliance: RoHS	Yes	Yes
Certification	FCC Class A	Yes	Yes
	CE	Yes	Yes
	Safety Compliance: CB	Yes	Yes
	Safety Compliance: UL	Yes	Yes
ecCLOUD		Yes	Yes

L2 Features

- 10/100/1000BASE-T copper interfaces
- Auto-negotiation for port speed and duplex mode
- Auto MDI/MDI-X
- Multi-speed (1G, 10G, 25G) fiber interfaces
- SFP28 Ports Support:
  IEEE 802.3ae (10GBASE-SR/LR)
  IEEE 802.3ay (25GBASE-SR)
  IEEE 802.3cc (25GBASE-LR)
  IEEE 802.3z (1000BASE-SX/LX) transceivers, and 10G/25G DAC/AOC
- Digital Diagnostic Monitoring (DDM) on 25G SFP28 port
- Flow Control:
  IEEE 802.3x for full duplex mode
  Back-Pressure for half duplex mode
- Jumbo frames 10KB
- Broadcast/Multicast/Unknown Unicast storm control
- Spanning Tree Protocol:
  IEEE 802.1D Spanning Tree Protocol (STP)
  IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
  IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), 64 instances
  BPDU Guard
  BPDU filtering
  Root Guard
  BPDU transparent
  Loopback detection
- Non-Spanning Tree loopback detection
- ITU-T G.8032v2 Ethernet Ring Protection Switch
  Sub 50 msec convergence
  Revertive operation mode
  Multiple-ring network
- VLANs:
  Supports 4K VLAN
  Port-based VLAN
  IEEE 802.1Q VLAN
  GVRP
  IEEE 802.1v Protocol-based VLAN
  IP Subnet-based VLAN
  MAC-based VLAN
  Traffic Segmentation
- L2 Virtual Private VLAN:
  Q-in-Q
  L2 Protocol tunneling (xSTP, CDP, VTP and PVST+, LLDP)
  CDP/PVST+ Filtering
  Selective Q-in-Q
- Link Aggregation:
  Static Trunk
  IEEE 802.3ad Link Aggregation Control Protocol
  Trunk Groups: 28, up to 8 GE/ 6 25GE ports per group
  Load Balancing: SA+DA, SA, DA, SIP+DIP, SIP, DIP
- Multi-chassis Link Aggregation
- Static LACP
- IGMP Snooping:
  IGMP Authentication
  IGMP v1/v2/v3 snooping
  IGMP Proxy reporting
  IGMP Filtering
  IGMP Throttling
  IGMP Immediate Leave
  IGMP Querier
- MVR (Multicast VLAN Registration): Supports 5 multicast VLANs
- Port mirroring
  VLAN Mirror/Mac Based Mirror/ACL Mirror
- Remote port mirror (RSPAN)

QoS Features

- Priority Queues: 8 hardware queues per port
- Traffic Classification:
  IEEE 802.1p CoS
  IP Precedence
  DSCP
  MAC Access control list (Source/Destination MAC, Ether type, Priority ID/ VLAN ID)
  IP standard access control list (Source IP)
  IP extended access control list (Source/Destination IP, Protocol, TCP/UDP port number)
- Traffic Scheduling:
  Strict Priority
  Weighted Round Robin
  Strict + WRR
- Ingress policy map (police rate, remark CoS)
- Egress policy map (police rate, remark CoS/DSCP)
- Rate Limiting (ingress and egress, per port base)
  GE: Resolution 64 Kbps ~ 1,000 Mbps
  10G: Resolution 64 Kbps ~ 10,000 Mbps
  25GE: Resolution 64 Kbps~25,000 Mbps
- Auto Traffic Control

Security

- Port security
- IEEE 802.1X port based and MAC based authentication
- IEEE 802.1X Supplicant
- Dynamic VLAN Assignment, Auto QoS
- MAC authentication
- Web authentication
- Voice VLAN
- Guest VLAN
- L2/L3/L4 Access Control List:
  MAC Access control list (Source/Destination MAC, Ether type, Priority ID/ VLAN ID)
  IP standard access control list (Source IP)
  IP extended access control list (Source/Destination IP, Protocol, TCP/UDP port number)
- IPv6 ACL
- DHCP Snooping
- DHCP Info
- DHCP Option 82
- DHCP Option 82 Relay
- IP Source Guard
- PPPoE IA
- Dynamic ARP Inspection
- Denial of Service
- Login Security
- RADIUS authentication
- RADIUS accounting
- TACACS + authentication
- TACACS + accounting
- TACACS + authorization
- Management Interface Access Filtering (SNMP, Web, Telnet)
- SSH (v1.5/v2.0) for security Telnet
- SSL for HTTPS
- SNMPv3

Dying Gasp

Green Ethernet

- IEEE 802.3az Energy-Efficient Ethernet (EEE)

IPv6 Features
- IPv4/IPv6 dual protocol stack
- IPv6 Address Types Stack: Unicast
- IPv6 Neighbor Discovery:
  Duplicate address
  Address resolution
  Unreachable neighbor detection
- Stateless auto-configuration
- Manual configuration
- Remote IPv6 ping
- IPv6 Telnet support
- HTTP over IPv6
- SNMP over IPv6
- IPv6 Syslog support
- IPv6 TFTP support
- MLD Snooping v1/v2
- IPv6 Source Guard
- DHCPv6 Snooping
- MVR6

Management
- Zero Touch provisioning
- mDNS
- Switch Management:
  CLI via console port or Telnet
  Web management
  SNMP v1, v2c, v3
- Firmware and Configuration:
  Firmware upgrade via TFTP/HTTP/FTP/SFTP server
  Multiple configuration files
  Configuration file upload/download via TFTP/HTTP/FTP/SFTP server
- RMON (groups 1, 2, 3 and 9)
- DHCP client for IP address assignment
- DHCP dynamic provision Option 66,67
- SNTP
- Syslog (local Flash)
- Remotelog (RFC3164)
- SMTP (E-mail Notification)
- Supports LLDP (802.1ab)
- sFlow v4, v5
- IPv6 sFlow

Safety
- UL (CSA 22.2. NO 60950-1 and UL60950-1)
- CB (IEC60950-1)

Power Supply
- Power input:
  100 to 240 VAC, 50/60 Hz

Supported Transceivers and Cables
- 1000BASE-SX/LX
- 10GBASE-SR/LR/RJ45
- 10GBASE-DAC/AOC Cable
- 25GBASE-SR/LR
- 25GBASE-DAC/AOC
  - Note: More optics and detailed cabling information can be found at www.edge-core.com.

Routing
- L3 Features IPv4
  Multi-netting
  CIDR (Classless Inter-Domain Routing)
  Unicast Routing:
  Static Routes
- L3 Features IPv6
  IPv6 Unicast Routing:
  Static Routes

Electromagnetic Compatibility
- CE Mark
- FCC Class A
- CISPR Class A
- BSMI

Environmental Specifications
- Temperature:
  -5°C to 45°C (Standard Operating)
  -40°C to 70°C (Non-Operating)
- Humidity: 5% to 95% (Non-condensing)

Warranty
Please check www.edge-core.com for the warranty terms in your country.

For More Information
To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation
Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.