

L2+/L3 Lite Gigabit Ethernet Switch

ECS4150-28T/ECS4150-28P



The Edgecore ECS4150-28T switch is a Gigabit Ethernet access switch with four 10G SFP+ uplinks. The switch is ideal for Internet Service Providers (ISPs) and Multiple System Operators (MSOs) wanting to provide home users with triple-play services with up to a Gigabit of bandwidth. This switch is also positioned as Cloud Edge access switch to connect IOT and other devices in Enterprises and SMB deployments. It is also an ideal Gigabit access switch for SMB, enterprise, and campus networks. The ECS4150-28P is a PoE switch which can provide up to 30 Watts to Power Devices such as Wireless Access Point, VoIP Phone, Surveillance camera, IoT devices etc over Cat 5 UTP cable eliminate the need for individual power source. The ECS4150-28T/ECS4150-28P 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 10G uplinks
- Low power consumption with fanless and noiseless design
- ITU-T G.8032 ERPS L2 Ring protection with <50 convergence time
- Comprehensive and field proven software features for ISP/ Carrier to provide broadband access, IPTV services
- L2+/ Lite L3 feature upgrades the L2 switch with routing functionality
- 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. 24 x RJ-45 10/100/1000BASE-T ports (ECS4150-28T)	5. RJ-45 console port
2. 24 x RJ-45 10/100/1000BASE-T PoE ports (ECS4150-28P)	6. USB management port
3. 4 x SFP+ 10 Gigabit uplink ports	7. AC power input
4. RJ-45 management port	

Product Model

ECS4150-28T

ECS4150-28P

Product Image

Port	RJ-45 10/100/1000BASE-T Ports	24	24
	SFP+ 10 Gigabit Uplink Ports	4	4
	RJ-45 Console Port	1	1
	USB port	1	1
Performance	Switching Capacity	128 Gbps	128 Gbps
	Forwarding Rate	95 Mpps	95 Mpps
	NAND Flash Memory	256 MB	256 MB
	DRAM	1 GB	1 GB
	MAC Address Table	16 K	16 K
	Jumbo Frames	10 KB	10 KB
	Auto-negotiation, Auto-MDI/MDIX	Yes	Yes
	Packet Buffer	1.5 MB	1.5 MB
	MTBF	563,074 hrs	125,675 hrs
	Heat Dissipation	86 Btu/h	1536 Btu/h
	Acoustic Noise	N/A	50 db
Mechanical	Dimension (W x D x H) cm	44 x 22 x 4.4 cm	44 x 28 x 4.4 cm
	Weight	3.05 kg (6.72 lb)	4.75 kg (10.47 lb)
Power Supply	AC 100-240 VAC, 50/60 Hz	Yes	Yes
	Max System Power Consumption (Watts)	25 Watts	450 Watts
PoE	IEEE 802.3af	X	Yes
	IEEE 802.3at	X	Yes
	Power budget	X	370 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 (IEC/EN 62368-1)	Yes	Yes
	Safety Compliance: UL (CSA 22.2 No 62368-1 & UL62368-1)	Yes	Yes
	ecCLOUD Support	Yes	Yes

L2 Features

- 10/100/1000BASE-T copper interfaces
- Auto-negotiation for port speed and duplex mode
- Auto MDI/MDI-X
- Dual-speed (1G and 10G) fiber interfaces
- SFP+ Ports Support:
 - IEEE 802.3ae changeable (10GBASE-SR/LR)
 - IEEE 802.3z (1000BASE-SX/LX) transceivers, and 10G DAC/AOC
- Digital Diagnostic Monitoring (DDM) on 10G SFP+ 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
 - BPDUGuard
 - BPDUGuard filtering
 - Root Guard
 - BPDUGuard transparent
 - Loopback detection
- Non-Spanning Tree Loopback detection
- ITU-T G.8032 Ethernet Ring Protection:
 - 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: 16, up to 8 GE/4 10G 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 64Kbps ~ 1,000Mbps
 - 10G: Resolution 64Kbps ~ 10,000Mbps
- 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

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

Routing

- IPv4 Static Route

Dying Gasp

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
 - Note: More optics and detailed cabling information can be found at www.edge-core.com.

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.

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