L2+/L3 Lite Gigabit Ethernet Switch
ECS4130-28T/ECS4130-28T-DC

The Edgecore ECS4130-28T 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. It is also an ideal Gigabit access switch for SMB, enterprise, and campus networks. The ECS4130-28T 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
- Compact size for space saving installation
- Optional AC or DC power input
- 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
- Simple management (CLI, SNMP, Web)
- Complete Private MIB to fully control and monitor the switch via customer's EMS

Interfaces
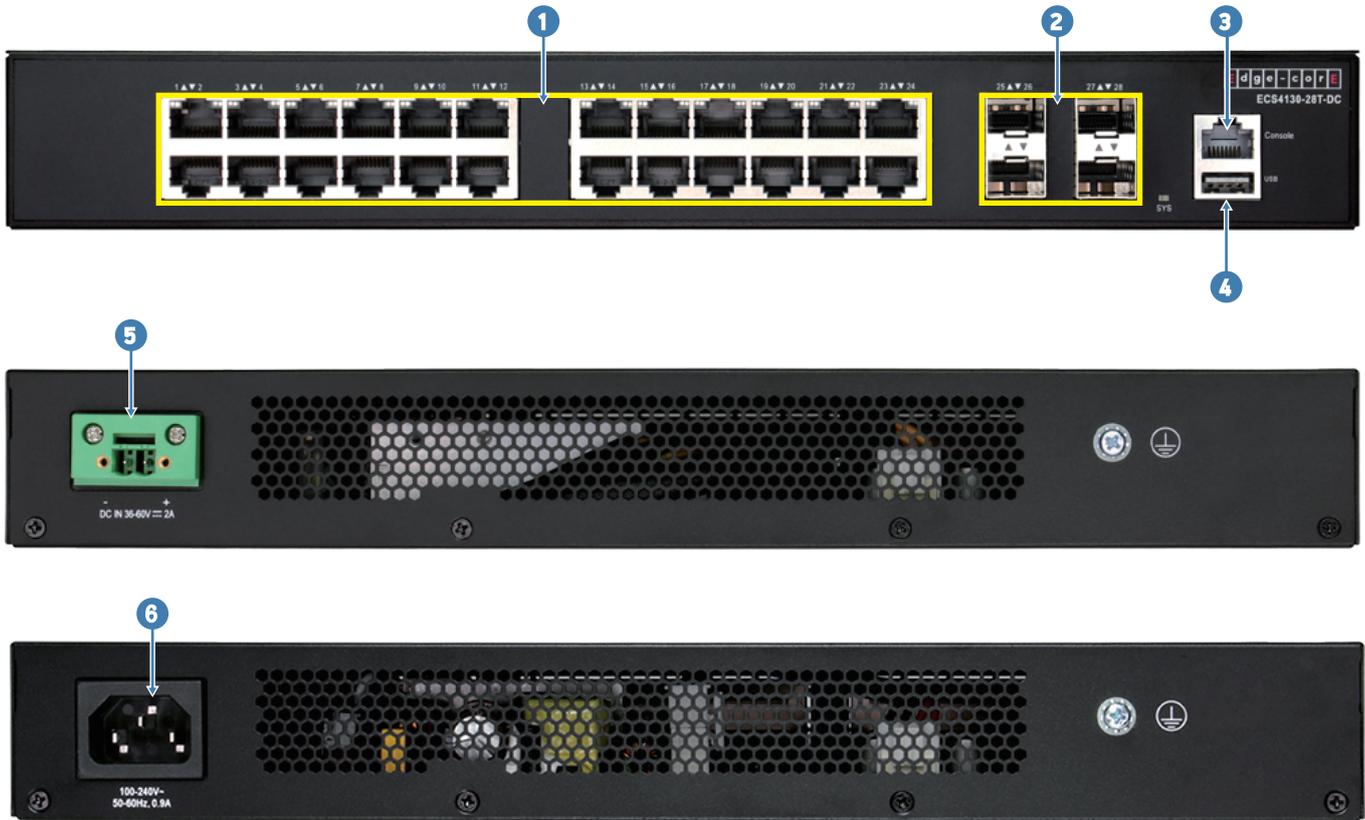
Description

1.	24 x RJ-45 10/100/1000BASE-T ports	6.	USB management port
2.	4 x SFP+ 10 Gigabit uplink ports	7.	DC power input
3.	RJ-45 console port	8.	AC power input

Product Model	ECS4130-28T	ECS4130-28T-DC
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
Flash Memory	1 G	1 G
DRAM	512MB	512 MB
MAC Address Table	16 K	16 K
Jumbo Frames	10 KB	10 KB
Auto-negotiation, Auto-MDI/MDIX	Yes	Yes
Mechanical		
Dimension (W x D x H) cm	33 x 23 x 4.4 cm	33 x 23 x 4.4 cm
Weight	2 kg	2 kg
Power Supply		
AC 100-240 VAC, 50/60 Hz	Yes	Yes
DC 36-60 V, 2 A	No	Yes
Max System Power Consumption (Watts)	23 W (full loading)	23 W (full loading)
Environmental		
Operating Temperature	0 ~ 45ºC	0 ~ 45ºC
Storage Temperature	-40 ~ 70ºC	-40 ~ 70ºC
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

L2 Features

- 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
  BPDU Guard
  BPDU filtering
  Root Guard
  BPDU 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
  EEE 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
- IGMP Snooping:
  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
- 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
- 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 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
- 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)
- BOOTP, 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

Routing
- IPv4 Static Route

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 (ECS4130-28T)
  DC in 36-60V (ECS4130-28T-DC)

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

Environmental Specifications
- Temperature:
  0℃ to 45℃ (Standard Operating)
  -40℃ to 70℃ (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.

Ordering Information

Model Number	Description
ET4202-SX	1000BASE-SX Multi mode LC Duplex SFP transceiver, up to 550 m (850 nm)
ET4201-LX	1000BASE-LX Single mode LC Duplex SFP transceiver, up to 10 km (1310 nm)
ET4352-BX20	1000BASE Single mode LC Simplex SFP transceiver with DDM, up to 20 km, Wavelength: Tx1310 nm/Rx1550 nm
ET4532-BX20	1000BASE Single mode LC Simplex SFP transceiver with DDM, up to 20 km, Wavelength: Tx1550 nm/Rx1310 nm
ET5402-SR	10GBASE-SR Multi mode LC Duplex SFP+ transceiver with DDM, up to 300 m (850 nm)
ET5402-LR	10GBASE-LR Single mode LC Duplex SFP+ transceiver with DDM, up to 10 km (1310 nm)
ET5402-DAC-3M	10G to 10G DAC cable,10G SFP+ DAC cable, 3 m
ET5402-AOC-7M	10G to 10G AOC cable,10G SFP+ AOC cable, 7 m