

ESW-2128GSFP Management Ethernet Switch



Features

- **MEF 9 compliant**
MEF 9 compliant product to dramatically reduce the time cost and risk of deployment
- **SKA 3.1 compliant**
SKA 3.1 compliant makes the switch to offer a secured and high quality solution that is easier to enter metro Ethernet market
- **SFF-8472 Diagnostic Monitor Interface**
Allow managers to view SFP information and status including speed, distance, Vendor ID, Vendor S/N, temperature, voltage, TX Bias, etc
- **Many functions to facilitate multimedia streaming**
Support IGMP snooping, IGMP fast leave, IGMP filtering & advanced MVR to intelligently transmit multicast traffic and deliver IPTV service
- **Support Q-in-Q VLAN tag**
Allows service providers to implement Metro Ethernet service while maintaining the layer-2 separation of different customers
- **Unique power down trap technology**
Built in CTS unique SNMP power down trap function to rapidly detect network fault due to power outage
- **Power Supply Redundancy**
Combination of two powers (2AC, 2DC, 1AC1DC) can be installed to increase reliability as well as power sharing

Target Applications

- FTTX implementations, Metro Ethernet implementations

24 ports 10/100Mbps RJ-45 + 4 combo uplink ports (10/100/1000 Mbps RJ-45 and 1000Mbps SFP slot) Managed Ethernet Access Switch

Description

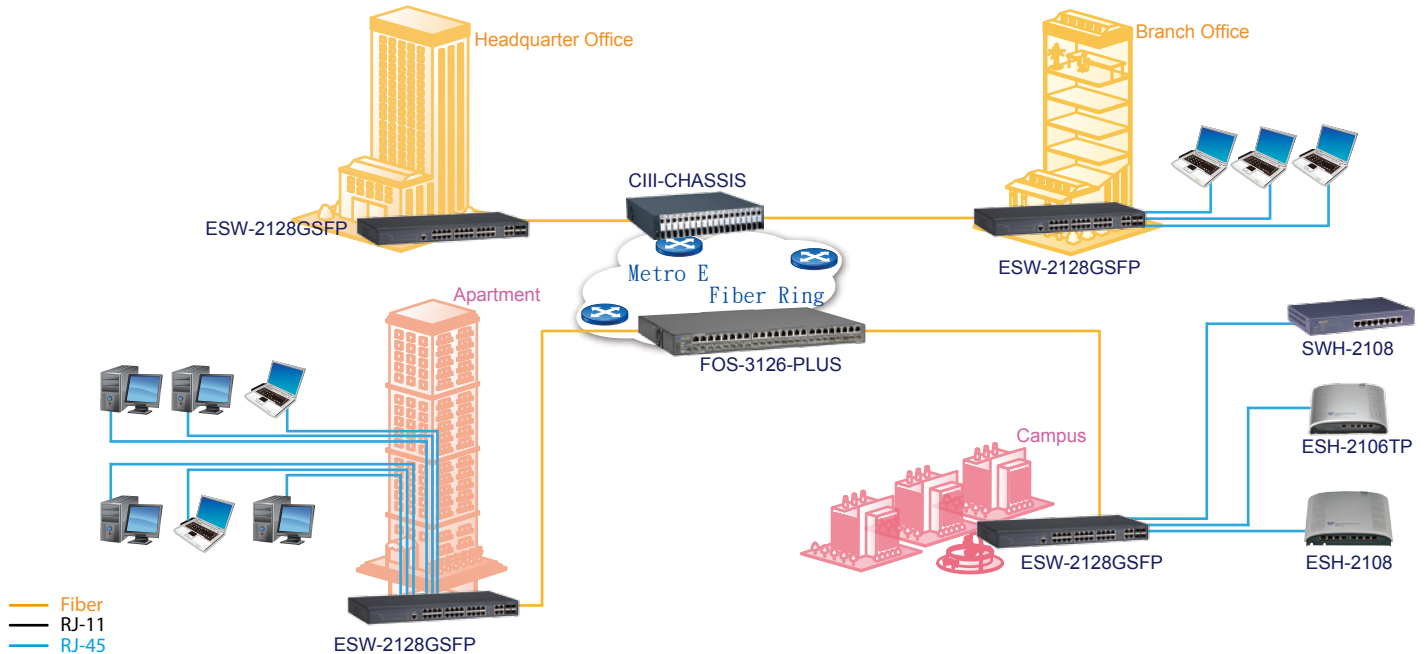
Connection Technology Systems (CTS) ESW-2128GSFP is a layer-2+ access switch equipped with 24 ports 10/100Mbps RJ45 and 4 ports combo uplink (10/100/1000Mbps RJ45 + 1000Mbps SFP). The 4 uplink SFP slots can accommodate wide range of gigabit SFP transceivers including single-mode, wdm or cwdm transceivers. It is built for service providers, enterprises, and SMBs who are planning to implement FTTX or Metro Ethernet networks, with further spanning into triple-play service.

Nowadays, more and more service providers are planning to implement or extend their existing data service with triple-play service, because triple-play service combines data, voice and video traffic in one box which can generate higher revenue return per unit. ESW-2128GSFP is equipped with advanced multimedia features including MVR, IGMP snooping, IGMP fast leave, IGMP filtering, as well as various QoS classifications and rate limit control, which can facilitate service providers to build a manageable network environment and deliver a successful triple-play service.

Metro Ethernet service is also getting more and more popular to replace traditional wide area network through router and serial port. Deploying Metro Ethernet Network can not only provide much higher bandwidth to satisfy the market demand, but also allow service providers to plan more value-added and multimedia services while simplifying the needed skills to manage the network. For security, ESW-2128GSFP has come with Q-in-Q feature based on IEEE802.1q standard. This feature provides service providers a layer-2 separation for all the customers who are connected through his Metro Ethernet Network. Sometimes, even a customer may already have configured his own VLANs, but it will not interfere with other customer who has also configured his own VLANs.

Designed with carrier-grade in mind while keeping user-friendly for MIS staff, ESW-2128GSFP can be easily managed by web interface, console CLI, telnet, SNMP, private MIB, and DHCP auto-provision. With CTS unique power down trap feature, ESW-2128GSFP is able to send out a SNMP trap message when encountering power outage.

Application Diagram



Specification

Interface

10/100Mbps RJ-45 x 24
1000Mbps Combo ports x 4
DB-9 (DTE) console port x 1

Standards

IEEE 802.3 10Base-T
IEEE 802.3u 100Base-TX
IEEE 802.3ab 1000Base-T
IEEE 802.3z 1000Base-X
IEEE 802.1w Rapid Spanning Tree
IEEE 802.1p Priority
IEEE 802.1q Tag VLAN
IEEE 802.1X Port Based Network Access Control

Software Function

Store and Forward Switching Mechanism
Auto-Cross over for MDI/MDIX in TP port
Auto-Negotiation in TP port
Comply with

- IEEE 802.1p Priority
- IEEE 802.1q Tag VLAN / Port Based VLAN
- IEEE 802.1w Rapid Spanning Tree Protocol
- IEEE 802.1x Port Based Network Access Control Support
- SFF-8472 DMI(diagnostic monitor interface)
- SNMP, CLI, Telnet, Web management

- Jumbo frame on all ports up to 9612 bytes size
- QoS classification based on IEEE 802.1p, VID, ToS/DSCP/CoS, Ethertype, TCP/UDP port No.IPv4 DSCP Remarking
- Provider bridging with multiple VLAN tags (Q-in-Q)
- Protocol Based VLAN
- Rate Limit Control
- Static Multicasting
- IGMP Snooping v1, v2
- IGMP fast leave
- IGMP filtering via Filtering Profile
- Multicast channel limitation per port
- Multicast VLAN Registration (MVR)
- DHCP client and provision server
- DHCP Snooping
- RFC3046 DHCP relay agent with option 82
- Access Control List (ACL)
- Port Isolation
- IPv6 & UPnP Filtering
- RADIUS Authentication
- SNMP v1, v2c network management
- Private, RFC-1213, RMON MIBs
- Port Mirror
- FTP, TFTP server and client firmware upgrade
- SNTP Time Server
- Power Down Trap management

LED

Power A/B, COM, Status, Speed, Link/ACT

Product Spec

Mac address table: 16K
Memory buffer: Total 448K bytes
VLANs: Support up to 128 VLAN Groups
Priority Queues: 8 Queues

Forward / Filter Rate

10M: 14,880/14,880pps
100M: 148,800/148,800pps
1000M: 1,488,000/1,488,000pps

Power

Input AC 90V-240V 50/60Hz
Input DC 48VDC
Power Consumption
- AC Side: 19W

Typical Operation & Storage Temperature

Operation: 0° ~ 50°C
Storage Temperature: -20° ~ 60°C
Humidity: 5% ~ 90% non-condensing

Dimension & Weight

Size: 440 x 205 x 44 mm (WxDxH)
Shipping Weight: 5KG

Emission/Safety

FCC Class A, CE

Order Information

ESW-2128G Series

MODEL	FIBER PORT					TP PORT	
	Speed	Type	Connector	Distance	Ports	Speed	Ports
ESW-2128GSFP-1AC	1000	SFP	-	-	4	10/100 1000	24 4
ESW-2128GSFP-2AC	1000	SFP	-	-	4	10/100 1000	24 4
ESW-2128GSFP-1DC	1000	SFP	-	-	4	10/100 1000	24 4
ESW-2128GSFP-2DC	1000	SFP	-	-	4	10/100 1000	24 4

SFP-31 Series

MODEL	FIBER PORT				
	Speed	Type	Connector	Distance	Wavelength
SFP-31FC	1000Mbps	MM	LC	550M	850nm
SFP-31FC(SM-10/20/40/50/80/120)	1000Mbps	SM	LC	10/20/40/50/80/120KM	1310nm/1310nm/1310nm/1550nm/1550nm/1550nm
SFP-31W2A(SM-10/20/40/80)	1000Mbps	WDM	LC	10/20/40/80KM	TX:1310nm/1310nm/1310nm/1490nm RX:1550nm/1550nm/1550nm/1570nm
SFP-31W2B(SM-10/20/40/80)	1000Mbps	WDM	LC	10/20/40/80KM	TX:1550nm/1550nm/1550nm/1570nm RX:1310nm/1310nm/1310nm/1490nm
SFP-31FC-C09	1000Mbps	CWDM	LC	80KM	1430nm
SFP-31FC-C10	1000Mbps	CWDM	LC	80KM	1450nm
SFP-31FC-C11	1000Mbps	CWDM	LC	80KM	1470nm
SFP-31FC-C12	1000Mbps	CWDM	LC	80KM	1490nm
SFP-31FC-C13	1000Mbps	CWDM	LC	80KM	1510nm
SFP-31FC-C14	1000Mbps	CWDM	LC	80KM	1530nm
SFP-31FC-C15	1000Mbps	CWDM	LC	80KM	1550nm
SFP-31FC-C16	1000Mbps	CWDM	LC	80KM	1570nm
SFP-31FC-C17	1000Mbps	CWDM	LC	80KM	1590nm
SFP-31FC-C18	1000Mbps	CWDM	LC	80KM	1610nm