

FOS-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 100Mbps SFP with Uplink 4 combo ports (10/100/1000Mbps copper and 1000Mbps SFP)
Managed Ethernet Switch

Description

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

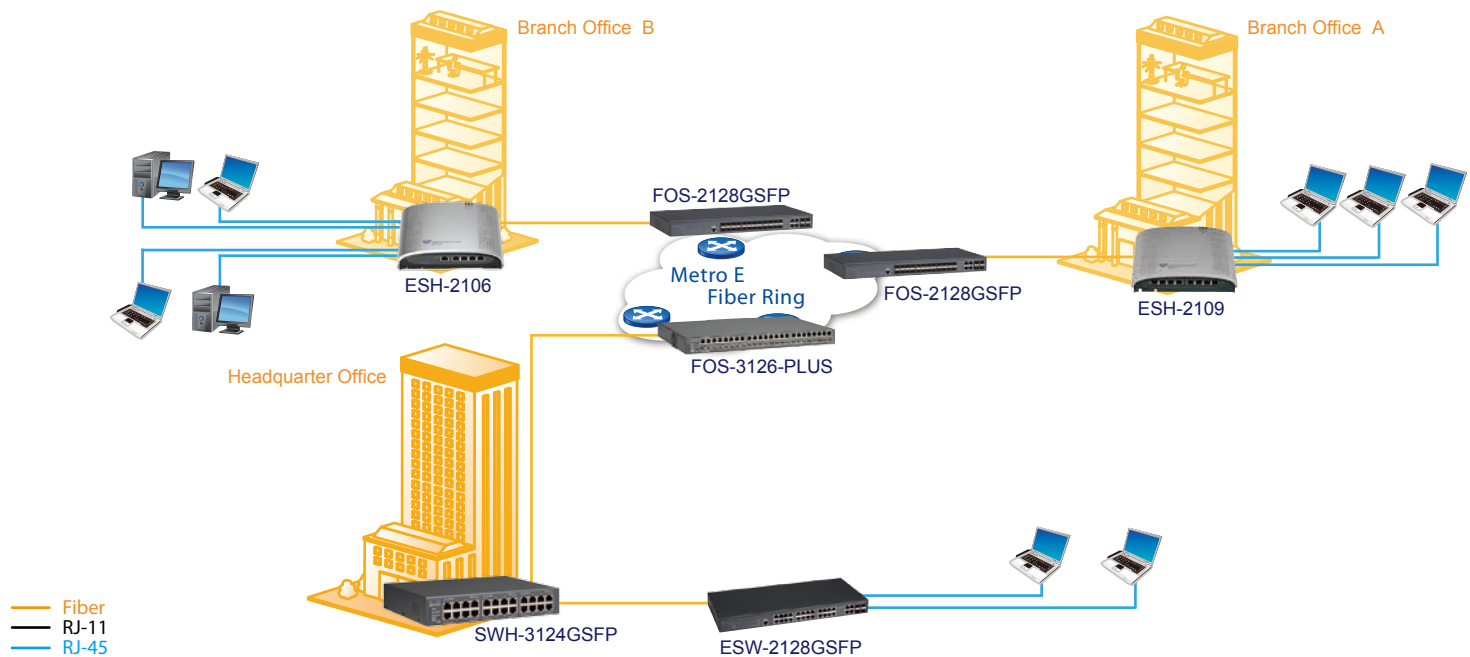
FOS-2128GSFP delivers wire-speed throughput for data, voice and IPTV services, using non-blocking 12.8Gbps switching fabric. 1+1 power supply redundancy can provide both failover and power sharing capabilities when power supplies are connected to different circuits. AC and DC powers can be mixed in the same unit for deployment flexibility.

Many service providers are extending their existing data service with triple-play service, because it can generate higher revenue return by combining data, voice and video traffic in one box. Advanced features including MVR, IGMP snooping, IGMP fast leave, IGMP filtering, various QoS classifications and rate limit control facilitate service providers to deploy a manageable network environment and deliver a successful triple-play service.

Deploying Metro Ethernet Network is also the market trend that is going to replace traditional wide area network through router and serial port. Metro Ethernet Network not only provides much higher bandwidth to satisfy the market demand in the long run, but also allows service providers to plan more value-added and multimedia services while simplifying the needed skills to manage the network. In order to provide customers extra security and separation, FOS-2128GSFP has come with Q-in-Q feature. This feature enables service providers to separate different customers at layer-2 level, even the customers already have configured their own VLANs.

Designed with carrier-grade in mind while keeping user-friendly for administrators, FOS-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, FOS-2128GSFP will send out a SNMP trap message when encountering power outage.

Application Diagram



Specification

Interface

100Mbps SFP 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/FX
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

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

Software Feature

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 9216 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 Base 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

Power

Input AC 90V-240V 50/60Hz
Input DC 36-72VDC
Power Consumption:
- DC Side: 32W

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

* For further reports, please contact us for update

Order Information

FOS-2128G Series

MODEL	FIBER PORT					TP PORT	
	Speed	Type	Connector	Distance	Ports	Speed	Ports
FOS-2128GSFP-1A	100 1000	SFP SFP	-	-	24 4	1000	4
FOS-2128GSFP-2A	100 1000	SFP SFP	-	-	24 4	1000	4
FOS-2128GSFP-1D	100 1000	SFP SFP	-	-	24 4	1000	4
FOS-2128GSFP-2D	100 1000	SFP SFP	-	-	24 4	1000	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

SFP-21 Series

MODEL	FIBER PORT				
	Speed	Type	Connector	Distance	Wavelength
SFP-21FC	100Mbps	MM	LC	2KM	1310nm
SFP-21FC(SM-20/40/80)	100Mbps	SM	LC	20/40/80KM	1310nm/1310nm/1550nm
SFP-21W2A(SM-20/40/80)	100Mbps	WDM	LC	20/40/80KM	TX:1310nm/1310nm/1490nm RX:1510nm/1510nm/1570nm
SFP-21W2B(SM-20/40/80)	100Mbps	WDM	LC	20/40/80KM	TX:1510nm/1510nm/1570nm RX:1310nm/1310nm/1490nm
SFP-21W2A(SM-20)SC	100Mbps	WDM	SC	20KM	TX:1310nm RX:1550nm
SFP-21W2B(SM-20)SC	100Mbps	WDM	SC	20KM	TX:1550nm RX:1310nm
SFP-21FC-C09	100Mbps	CWDM	LC	80KM	1430nm
SFP-21FC-C10	100Mbps	CWDM	LC	80KM	1450nm
SFP-21FC-C11	100Mbps	CWDM	LC	80KM	1470nm
SFP-21FC-C12	100Mbps	CWDM	LC	80KM	1490nm
SFP-21FC-C13	100Mbps	CWDM	LC	80KM	1510nm
SFP-21FC-C14	100Mbps	CWDM	LC	80KM	1530nm
SFP-21FC-C15	100Mbps	CWDM	LC	80KM	1550nm
SFP-21FC-C16	100Mbps	CWDM	LC	80KM	1570nm
SFP-21FC-C17	100Mbps	CWDM	LC	80KM	1590nm
SFP-21FC-C18	100Mbps	CWDM	LC	80KM	1610nm