

# FOS-3126-PLUS Management Gigabit 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
- CLI & Text-based Configuration**  
 Support popular CLI framework and structure. Configuration setting information is in accessible clear-text format
- 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
- IEEE 802.3ad Link Aggregation**  
 Cost-efficient way to increase bandwidth and reliability by grouping multiple links into one
- 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 combo ports (10/100/1000Mbps RJ-45 and 100/1000Mbps SFP slot) + 2 combo uplink ports (1000Mbps RJ-45 and 1000Mbps SFP slot) Managed Ethernet Access Switch

## Description

Connection Technology Systems (CTS) FOS-3126-PLUS is a layer-2+ gigabit access switch equipped with 24 combo ports (10/100/1000Mbps RJ45 and dual-speed SFP slot) and 2 combo uplink ports (1000Mbps RJ45+1000Mbps SFP slot). All combo SFP slots can accommodate wide range of SFP transceivers including single-mode, wdm or cwm 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.

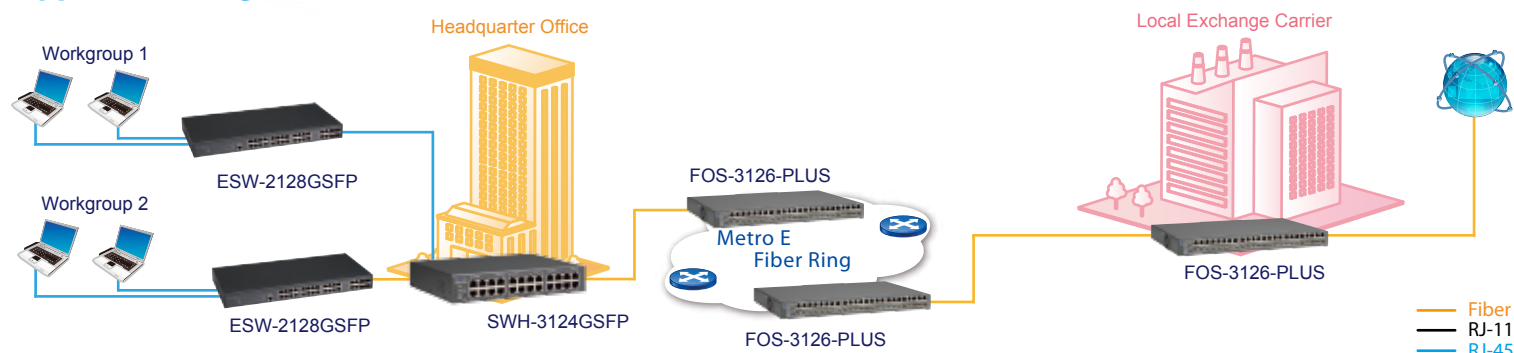
FOS-3126-PLUS delivers wire-speed throughput for data, voice and IPTV services, using non-locking 52Gbps switching fabric. 1+1 power supply design can provide both failover and power sharing capabilities when power supplies are connected to different circuits. AC and DC powers can be mixed in the same unit for deployment flexibility.

Many service providers are extending their existing data service with triple-play service, because triple-play service can generate higher revenue return by combining data, voice and IPTV 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 gradually replaces 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-3126-PLUS 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-3126-PLUS 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-3126-PLUS will send out a SNMP trap message when encountering power outage.

## Application Diagram



## Specification

### Interface

Combo ports x 24 (Front panel)  
 Combo ports x 2 (Rear panel)  
 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 802.3ad Link Aggregation  
 IEEE 802.1ag CFM  
 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 1/2, Fiber 1/2, Copper 1/2, Console, Status, Link/Act, Speed

### Product Spec

Mac address table: 8192  
 Memory buffer: Total 1391K bytes  
 VLANs: Support up to 128 VLAN Groups  
 Priority Queues: 4 Queues

### 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
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.1x Port Based Network Access Control

Support

- SNMP, Web, Telnet and Console management
- IEEE 802.1ag CFM
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- Jumbo frame on all ports up to 9600 bytes size
- QoS classification based on IEEE 802.1p, VID, ToS/DSCP
- Ethertype and L4 Port
- DHCP Snooping
- Provider bridging with multiple VLAN tags (Q-in-Q)
- Rate Limit Control
- SNTP Time Server
- Static Multicasting
- IGMP Snooping v1, v2
- IGMP fast leave
- IGMP filtering via Filtering Profile
- Multicast channel limitation per port
- Multicast VLAN Register (MVR)
- DHCP client and provision server
- RFC3046 DHCP relay agent with option 82
- FTP, TFTP server and client firmware upgrade
- Access Control List (ACL) in web interface
- Radius Authentication
- SNMP v1, v2c and network management

- Private, RFC-1213, RMON MIBs

- Port Mirror

- Power Down Trap management

### Forward / Filter Rate

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

### Power

Input AC 100V-240V 50/60Hz  
 0.68A (Maximum)

Input DC 48VDC / 1.45A

Power Consumption:

- AC Side: 60W (Maximum)

### Typical Operation & Storage Temperature

Operation: 0° ~ 50°C

Storage Temperature: -20° ~ 60°C

Humidity: 5% ~ 90% non-condensing

### Dimension & Weight

Size: 436 x 310 x 44 mm (WxDxH)

Shipping Weight: 5KG

### Emission/Safety

FCC Class A, CE

\* For further reports, please contact us for update

## Order Information

MODEL	FIBER PORT					TP PORT	
	Speed	Type	Connector	Distance	Ports	Speed	Ports
FOS-3126-PLUS-1A	100/1000 1000	SFP	-	-	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-2A	100/1000 1000	SFP	-	-	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-1D	100/1000 1000	SFP	-	-	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-2D	100/1000 1000	SFP	-	-	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24AS20-1A	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24BS20-1A	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24AS20-2A	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24BS20-2A	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24AS20-1D	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24BS20-1D	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24AS20-2D	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2
FOS-3126-PLUS-F24BS20-2D	100/1000 1000	SFP/WDM SFP	LC -	20KM -	24 2	10/100/1000 1000	24 2