

FOS-3124 Management Gigabit Ethernet Switch



Features

- **SFF-8472 Diagnostic Monitor Interface**
Allow manager to View SFP information and status including speed, distance, Vendor ID, Vendor S/N, temperature, voltage, TX Bias, etc
- **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

20 100/1000Mbps SFP slots + 4 combo uplink ports
(10/100/1000Mbps RJ-45 and 100/1000Mbps SFP slot)
Managed Ethernet Switch

Description

Connection Technology Systems (CTS) FOS-3124 is a layer-2+ gigabit access switch equipped with 20 dual-speed SFP slots and 4 combo uplink ports (10/100/1000Mbps RJ45+100/1000Mbps SFP slot). All combo 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.

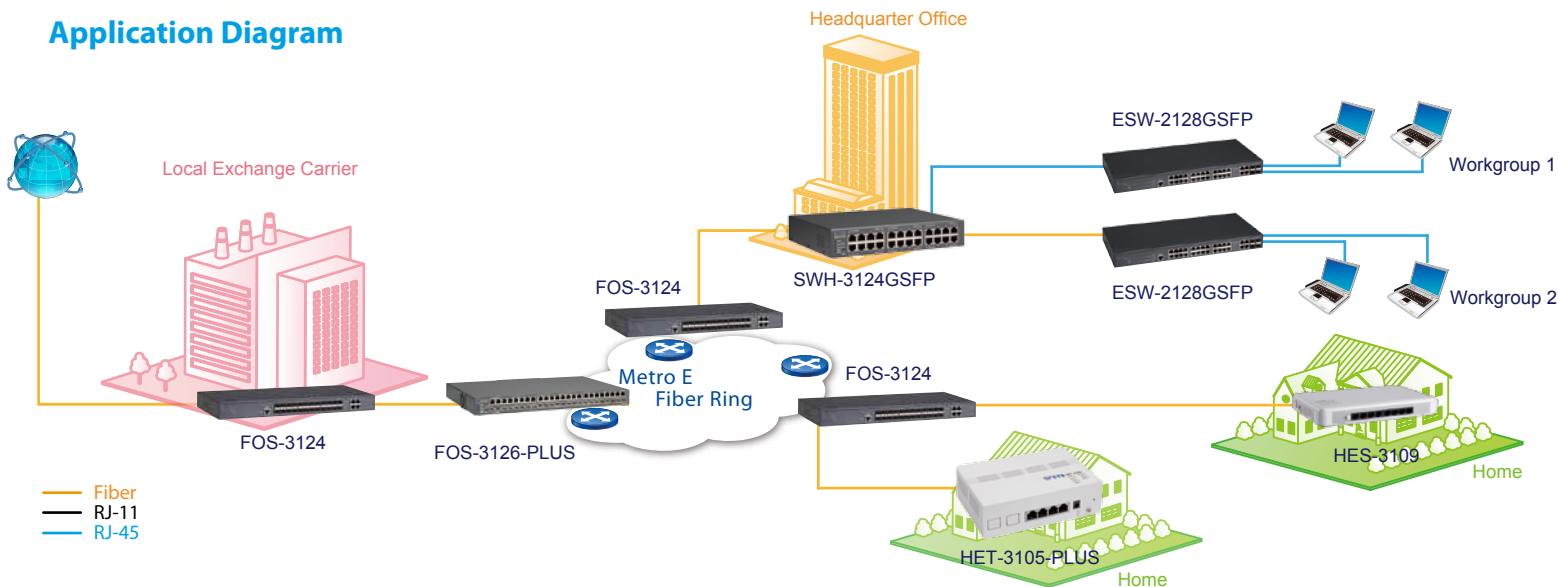
FOS-3124 delivers wire-speed throughput for data, voice and IPTV services, using non-locking 48Gbps switching fabric. 1+1 power supply design can provide both failover and power sharing capabilities when power supplies are connected to different circuits. AC and DC powers can be mixed in the same unit 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-3124 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-3124 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-3124 will send out a SNMP trap message when encountering power outage.

Application Diagram



Specification

Interface

100/1000Mbps SFP x 20
 Combo ports x 4
 RJ-45 console port x 1

*Combo port (10/100/1000Mbps RJ-45 and 100/1000Mbps SFP)

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 802.1w 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: 8192
 Memory buffer: Total 1391K bytes
 VLANs: Support up to 1024 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
 Support SNMP, Web, Telnet CLI and Console management
 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

- 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
- Q-in-Q VLAN Double Tag
- 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)
- Radius Authentication

- SNMP v1, v2c and network management
- Private, RFC-1213, RMON MIBs
- Port Mirror
- SNMP 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
 Input DC 48VDC
 Power Consumption:
 - AC Side: 41.2W (Maximum)
 - DC Side: 33.8W

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-3124 Series

MODEL	FIBER PORT					TP PORT		SUPPORT POWER SOURCE
	Speed	Type	Connector	Distance	Ports	Speed	Ports	Power Type
FOS-3124-1A	100/1000	SFP	-	-	24	10/100/1000	4	Fixed 1 internal AC
FOS-3124-2A	100/1000	SFP	-	-	24	10/100/1000	4	Fixed 2 internal AC
FOS-3124-1D	100/1000	SFP	-	-	24	10/100/1000	4	Fixed 1 internal DC
FOS-3124-2D	100/1000	SFP	-	-	24	10/100/1000	4	Fixed 2 internal DC
FOS-3124-1AD	100/1000	SFP	-	-	24	10/100/1000	4	Fixed 1 internal DC AND internal AC

SFP-31-DR Series

MODEL	FIBER PORT				
	Speed	Type	Connector	Distance	Wavelength
SFP-31FC-DR	100Mbps/1000Mbps	MM	LC	550M/2KM	1310nm
SFP-31FC(SM-10)-DR	100Mbps/1000Mbps	SM	LC	10KM	1310nm
SFP-31W2A(SM-10/20)-DR	100Mbps/1000Mbps	WDM	LC	10/20KM	TX:1310nm RX:1550nm
SFP-31W2B(SM-10/20)-DR	100Mbps/1000Mbps	WDM	LC	10/20KM	TX:1550nm RX:1310nm

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