

# FOS-3114 Management Gigabit Ethernet Switch



14 ports 100/1000Mbps SFP Managed Ethernet Switch

## Features

- **Adequate Management Interface**  
Support WEB, Telnet, CLI, SNMP and Out-band console interface
- **Commonly used Layer 2 Switch features**  
Port Configuration, Tag VLAN, QoS, Spanning Tree, LACP and L2 multicast IGMP
- **Security and Advance features**  
DHCP Snooping, Port mirror, Loop detection, IP Source Guard, Storm Control and MAC address limit
- **Management & Maintains features**  
Text based CLI configuration, TFTP/FTP for firmware & Configure upgrade, Event and Syslog and SNMP power down trap.
- **IPv4/IPv6 Dual Stack**  
Support IPv6 management, packet forwarding and MLD v1/v2 snooping.
- **Fan less and Half-Size Rack design**  
For small cabinet and limit narrow space installation environment .

## Description

Connection Technology System (CTS) FOS-3114 Enterprise switch is a Fiber Gigabit Ethernet 100/1000Base-X switch with robust metal case.

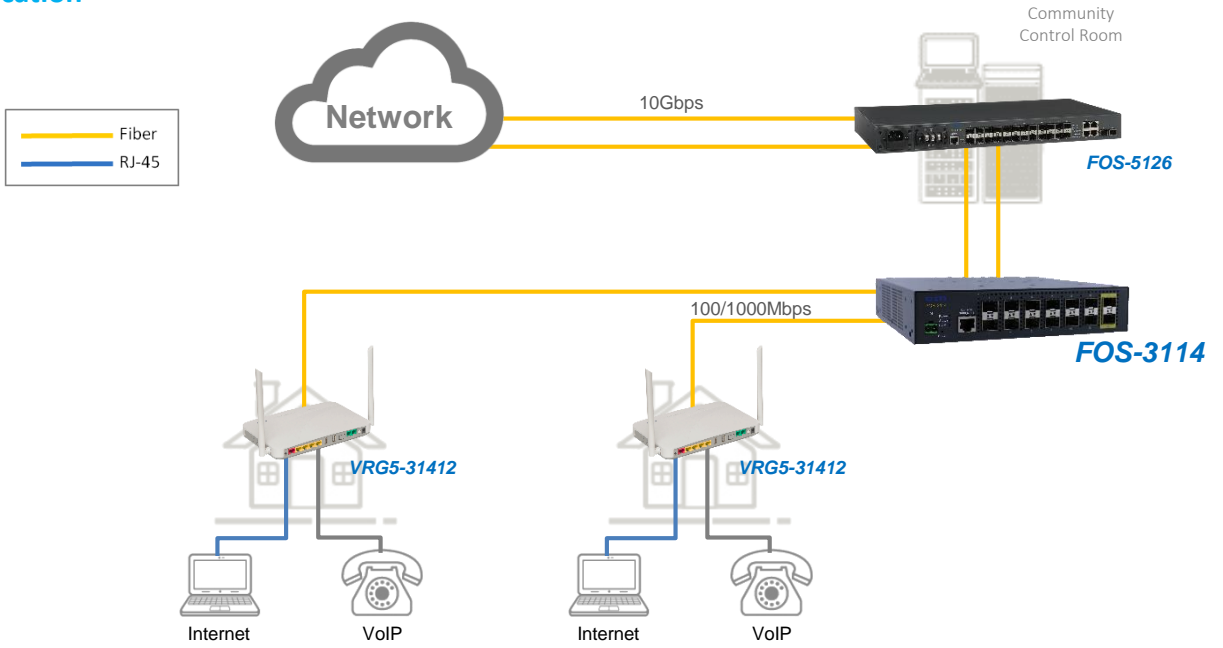
The FOS-3114 enterprise switch can be easily managed by Web GUI, telnet CLI, and SNMP. To fulfill the requirement of mass deployment, the device also supports the auto provisioning mechanism to allow the network managers to manage the device automatically and dynamically to save the OPEX. With CTS unique power down trap feature, FOS-3114 is able to send out a SNMP trap message when unexpected power outage occurs.

The FOS-3114 is also designed to facilitate the deployment of SME networks by supporting various VLAN features such as port-based VLAN, Tag VLAN and Q-in-Q. With these features, the service providers would be able to connect a SME's branches in different locations and form a kind of local area network. It also support security features such as DHCP snooping, IP source guard, loop detection and storm controls to create a stable network.

## Target Applications

- Layer 2 Ethernet SMB requirement or fiber in the building distribution

## Application



## Specification

### Interface

- Uplink Port (Type):  
2 x 100/1000Mbps SFP
- LAN Port (Type):  
12 x 100/1000Mbps SFP
- Console Port (Type):  
1 x RS-232 Port (RJ-45)
- Terminal Block  
1 x Digital Input (Dry contact)

### Standards

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX/FX
- IEEE 802.3z 1000Base-X
- IEEE 802.3x Flow Control
- IEEE 802.3ad Link Aggregation
- IEEE 802.1ab LLDP
- IEEE 802.1p Priority
- IEEE 802.1q Tag VLAN
- IEEE 802.1d STP
- IEEE 802.1w RSTP
- IEEE 802.1x Port based Network Access Control

### H/W Specification

- MAC Address table : 8K
- Non-Blocking Switching Fabric : 28Gbps
- Memory buffer: 524K Bytes
- Jumbo frame : 9K Bytes
- Store and Forward Switching Mechanism

### LED

- Power , Status , COM , Link/Act

### Forward / Filter Rate

- 100M: 148,800/148,800pps
- 1000M:1,488,000/1,488,000pps

### Layer 2 Switch Features

#### VLAN

- IEEE 802.1q tag VLAN with P-bit Marking
- VLAN concurrent groups: 2K VLAN Groups
- Port Based VLAN
- Q-in-Q Double tag with Configurable EtherType

#### QoS

- QoS 802.1p CoS / DSCP with Weighted Round-Robin(WRR) and Strict-Priority Queuing (SPQ) Scheduling Algorithm.
- QoS Priority Queues : 8 Queues
- 802.1p P-bit & DSCP Remarking
- Port based rate limit (ingress/egress)

#### Network Redundancy

- STP IEEE 802.1d
- RSTP IEEE 802.1w
- LACP algorithm of source / destination IP, MAC , L4 Port
- Static Port Trunking
- Up to 7 Aggregation Groups, 8 ports per Group

#### Multicast

- IGMP Snooping v1/v2/v3
- IGMP Fast Leave
- MLD v1/v2 Snooping
- IP Multicast Filter with Segment & Profile
- Static Multicast Configuration

#### IPv6 Feature

- IPv6 over Ethernet (RFC 2464)
- IPv6 Addressing Architecture (RFC 4291)
- IPv6 Dual Stack (RFC4213)
- ICMPv6 (RFC4884)
- Path MTU Discovery for IPv6 (RFC 1981)
- Neighbor Discovery (RFC4861)

#### Access Control List

- ACL Based on Physical port, EtherType ,VID , TOS/DSCP , Protocol Type , L4 Port and IP.

### Security

- 802.1x Port Base Access Control
- 802.1x RADIUS Authentication
- 802.1x MAC Authentication Bypass
- DHCP Option 82 Relay Agent
- DHCP Option 82 with configurable circuit & Remote ID
- DHCP Snooping
- IP Source Guard

### Management

- SNMP/WEB/Telnet/SSH/CLI Interface
- Text Base CLI Configure file
- Port Configuration Speed/duplex/flow control/Description
- NTP with Daylight Saving Time
- Layer 2 Control Protocol filter
- Static MAC address Table
- MAC Limiters
- LLDP
- Storm Control (Unicast/Multicast/Broadcast)

### Maintenance

#### Diagnostic

- Port Mirror
- ICMP Ping
- Event log
- Syslog
- SFP SFF-8472 DDMI monitor
- Power Down Trap

#### Upgrade/Restore

- HTTP/FTP/TFTP Firmware & configuration update
- DHCP Auto-provision via DHCP option 60/43 for firmware and configuration upgrade

#### Other

- Loop Detection

#### Monitoring

- CPU and Memory Statistics
- Switch Port Status , Traffic , packet Error , Packet Analysis Statics

### Power Requirement

- Input AC:100V-240V 50/60Hz
- Power Consumption: 12W

### Environmental Condition

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

### Dimension & Weight

- Size: 210 x 235 x 44 mm (W x D x H)
- Weight: 1.5Kg

### EMC/Safety

- FCC Class A, CE

## Order Information

### FOS-3114

Model	Fiber Ports					TP Ports		Support Power Source
	Speed	Type	Connector	Distance	Ports	Speed	Ports	
FOS-3114-1A	100/1000 Mbps	SFPS	-	-	14	-	-	Fixed 1 Internal AC