# **E**TCTS

## FOS-3110 Management Gigabit Ethernet Switch



8 ports 100/1000Mbps SFP + 2 combo uplink ports (10/100/1000Mbps RJ-45 and 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-3110 Enterprise switch is a Fiber Gigabit Ethernet 100/1000Base-X and 10/100/1000Base-T switch with robust metal case.

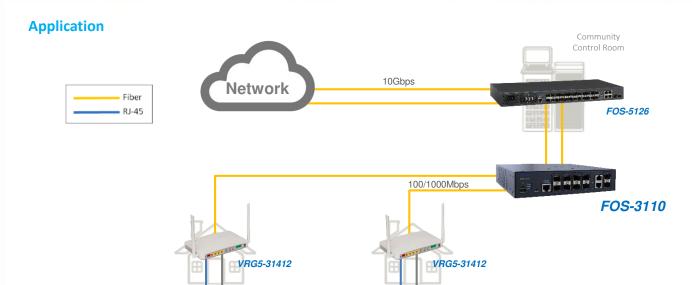
The FOS-3110 enterprise switch can be easily managed by Web GUI, telnet CLI, and SNMP. To fulfill the requirement of mass deployment, the device also supports the auto provisioning mechanism to allow the network managers to manage the device automatically and dynamically to save the OPEX. With CTS unique power down trap feature, FOS-3110 is able to send out a SNMP trap message when unexpected power outage occurs.

The FOS-3110 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

FOS-3110



Internet

VoIP

VolP

Internet



## Innovation to your needs

## **Specification**

#### ■Interface

-Uplink Port (Type):

2 x 100/1000Mbps Combo (SFP + RJ45)

-LAN Port (Type):

8 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 802.3ab 1000Base-T

IEEE 802.3z 1000Base-X

IEEE 802.3az EEE

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: 20Gbps

Memory buffer: 524K Bytes Jumbo frame: 9K Bytes

Store and Forward Switching Mechanism
Auto-Cross Over for MDI/MDUX in TP Ports

Auto-Negotiation in TP Ports
Full/Half Duplex Mode Operation

#### **■**LED

-Power, Status, COM, Link/Act

#### ■Forward / Filter Rate

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

### ■Layer 2 Switch Features

#### VIAN

-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 IFFF 802 1d

-RSTP IEEE 802.1w

-LACP algorithm of source / destination IP, MAC,

-Static Port Trunking

-Up to 5 Aggregation Groups, 6 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**

#### EOS-3110

FO2-3110									
	Model	Fiber Ports					TP Ports		Command Dances Comman
		Speed	Туре	Connector	Distance	Ports	Speed	Ports	Support Power Source
	FOS-3110-1A	100/1000 Mbps	SFP	-	-	10	10/100/1000 Mbps	2	Fixed 1 Internal AC