



Version 1.0

### **SWM-10USF2CB-A3110**

### **MANAGEMENT GIGABIT ETHERNET SWITCH**



### FAN LESS AND HALF-SIZE RACK DESIGN

### **Description**

CXR **SWM-10USF2CB-A3110** switch is a Fiber Gigabit Ethernet 100/1000Base-X and 10/100/1000Base-T switch with robust metal case.

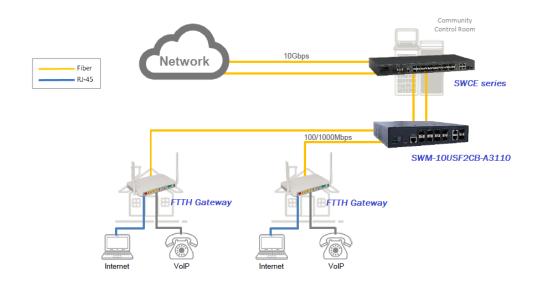
# SECURITY AND ADVANCE FEATURES

The **SWM-10USF2CB-A3110** 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 CXR unique power down trap feature, **SWM-10USF2CB-A3110** is able to send out a SNMP trap message when unexpected power outage occurs.

## IPv4/IPV6 Dual Stack

The **SWM-10USF2CB-A3110** 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

### **Application**





### Interface

Uplink Port (Type) 2 \* 100/1000Mbps Combo (SFP + RJ45)

LAN Port (Type) 8 \* 100/1000Mbps SFP

Console Port (Type) 1 \* RS-232 Port (RJ45)

Terminal Block 1 \* 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 5124K Bytes

Jumbo frame 9K

Store and Forward Switching Mechanism

Auto-Cross Over for MDI/MDIX in TP Ports

Auto-Negotiation in TP Ports

Full/Half Duplex Mode Operation



### Forward / Filter Rate

10M: 14.880/14.880pps

100M:148.800/148.800pps

1000M:1.488.000/1.488.000pps

### LED

Power, Status, COM, Link/Act

### 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)

### **Networking Redundancy**

- STP IEEE 802.1d
- RSTP IEEE 802.1w
- LACP algorithm of source/destination IP, MAC, L4 Port
- Static Port Trunking
- Up to 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



### Layer 2 Switch Features (suite)

#### **IPv6 Feature**

- IPv6 over Ethernet (RFC 2464)
- IPv6 Addressing Archiecture (RFC 4291)
- IPv6 Dual Stack (RFC 4213)
- ICMPv6 (RFC 4884)
- Path MTU Discovery for IPv6 (RFC 1981)
- Neighbor Discovery (RFC 4861)

### **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 Ma address Table
- MAC Limiters
- LLDP
- Storm Controll (Unicast/Multicast/Broadcast)



### Maintenance

### Diagnostics

- 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 Statictics

### **Power Requirement**

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

### **Environmental Condition**

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

### Dimension & Weight

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

### EMC / Safety

FCC Class A, CE



### **Ordering information**

Model	Description
SWMD-10USF2CB-A3110	Management Gigabit Ethernet Switch, 10 * 100/1000 SFP Ports, 2 * 10/100/1000 TP Ports with fixed internal AC power source.



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