Trademarks

Contents subject to revision without prior notice.

All trademarks remain the property of their respective owners.

Copyright Statement

This publication may not be reproduced as a whole or in part, in any way whatsoever unless prior consent has been obtained from owner.

FCC Warning

The Switch have been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These standards are designed to provide reasonable protection against harmful interference when these devices are operated in a commercial environment. These devices generate, use, and can radiate radio frequency energy that may cause harmful interference to radio communications unless installed in accordance with this User's Guide. Operation of these devices in a residential area is likely to cause harmful interference which will make the user responsible for the appropriate remedial action at his / her own expense.

1. Checklist

The package should contain the following items:

- Switch
- AC-DC Power Adapter
- User's Guide
- Sticker X 1
- Screws X 2

Please notify your sales representative immediately if any items are missing or damaged.

2. Overview

The Switch is designed to meet the increasing needs for Fast Ethernet network deployment and is able to extend a copper-based network via fiber cable to a maximum distance up to 80KM (maximum distance varies from 550M to 80KM depending on the model type of fiber transceiver used).

The Switch is fully compliant with IEEE 802.3 and 802.3u standards and can be placed in a cabinet or flat table with proper ventilation and away from electrical noises. The installation and operation procedures are simple and straightforward. Operational status can be locally monitored through a set of diagnostic LED indicators located on the upper side of the switch.

Major Features:

- 6-Port Fast Ethernet Switch
- Store and Forward Switching Mechanism
- Auto-Negotiation in TX port
- MDI/MDIX Auto-Crossover supported
- Support Flow Control
- Support IGMP Snooping V1,V2
- Support Jumbo Frame 9K bytes

3. Installation

- Attach fiber cable from the Switch to the fiber network. The fiber connections must be matched – transmit socket to receive socket.

- Attach a UTP cable from the 10/100BASE-TX network to the RJ-45 port on the Switch.

- Connect the power adapter to the Switch and check whether the Power LED indicator lights up. The LAN and WAN LED indicator will light up when all the cable connections are satisfactory.
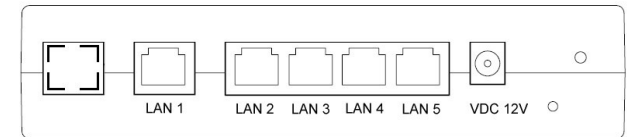

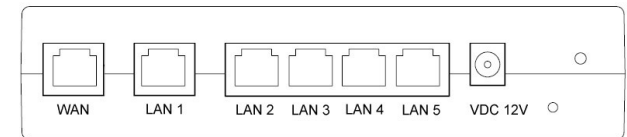Figure 1. WAN port Fiber or SFP interface
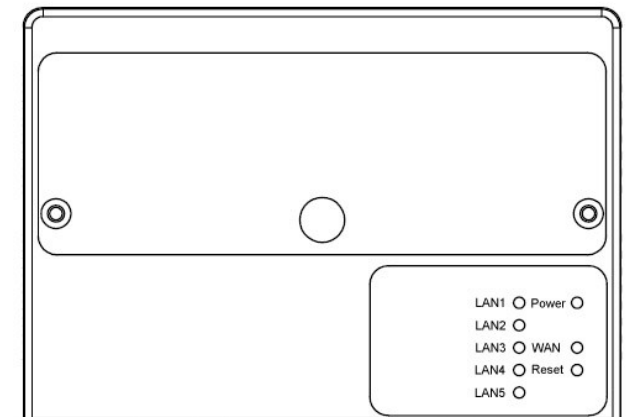

Figure 2. WAN port TP interface

Figure 3. LED Panel

4. LED Description

LED	Color	Function
Power	Green	Lit when power is available.
LAN	Green	Lit when TX cable connection with the remote device is good. Blink when TX traffic is present.
WAN	Green	Lit when Fiber cable connection with the remote device is good. Blink when FO traffic is present.

NOTE: WAN port is IGMP router port.

5. Technical Specifications

Standards: IEEE 802.3, 802.3u
Interface: WAN Fiber interface:
    5 x RJ-45 LAN connector
    1 x SC connector or SFP Slot
    1 x Reset button
    WAN TP interface
    6 x RJ-45 LAN connector
    1 x Reset button
Operation LED: Power, LAN , WAN
Power: I/P   AC 100-240V
    O/P DC 12V, 0.8A
Power Consumption: 4.7W
Shipping Weight: 1KG
Dimensions: 160mm(W)X110mm(D)X36mm(H)
Temperature: Operating: 0~50 $^{\circ}$C
    Storage: -20~60 $^{\circ}$C
Humidity: 5%~90% RH
Emission: Electrical: UL, CSA
    EMI: FCC Class A, CE
*Please contact us for further reports and updates.
Media:
TP   EIA/TIA-568 CAT 5e, 100M
Fiber   50/125, 62.5/125um multi-mode fiber
    9/125, 10/125um single-mode fiber

6. Reset Button

Press the button once to restart the device.

Fiber Transceiver Information

100M

Multi-Mode

TYPE	BTFC	BTFT
Connector Type	SC	ST
Wavelength	1310nm	1310nm
Typical Distance	2Km	2Km
Min TX PWR	-20.0dBm	-20.0dBm
Max TX PWR	-14.0dBm	-14.0dBm
Sensitivity	-31.0dBm	-31.0dBm
Link Budget	11.0dB	11.0dB

Single-Mode

TYPE	BTFC (SM-30)	BTFC (SM-50)	BTFC (SM-80)	BTFC (SM-100)
Connector Type	SC	SC	SC	SC
Wavelength	1310nm	1310nm	1310nm	1550nm
Typical Distance	30Km	50Km	80Km	100Km
Min TX PWR	-15.0dBm	-5.0dBm	0dBm	-5.0dBm
Max TX PWR	-8.0dBm	0dBm	5.0dBm	0dBm
Sensitivity	-34.0dBm	-35.0dBm	-36.0dBm	-35.0dBm
Link Budget	19.0dB	30.0dB	36.0dB	30.0dB

Wave-Length WDM

TYPE	W2A (SM-20)	W2B (SM-20)	W2A (SM-40)	W2B (SM-40)
Connector Type	SC	SC	SC	SC
TX Wavelength	1310nm	1550nm	1310nm	1550nm
RX Wavelength	1550nm	1310nm	1550nm	1310nm
Typical Distance	20 Km	20 Km	40 Km	40 Km
Min TX PWR	-14.0dBm	-14.0dBm	-8.0dBm	-8.0dBm
Max TX PWR	-8.0dBm	-8.0dBm	0dBm	0dBm
Sensitivity	-31.0dBm	-31.0dBm	-34.0dBm	-34.0dBm
Link Budget	17.0 dB	17.0 dB	26.0 dB	26.0 dB

NOTE: Specifications may change without prior notice.

5 ports 10/100Mbps RJ-45 + 1 port 100Mbps fiber optics uplink Ethernet CPE Switch

User's Guide

Version 0.93