MICROSENS

E1 SFP Programming Module
User Manual

MS100079

Caution

Circuit/electrical equipment is sensitive to the impact of static electricity, which can endanger their delicate electronics. Dry weather conditions or walking across a carpeted floor may cause you to acquire a static electrical charge.

To protect your equipment, please pay attention to the following:

- Touch the metal chassis of your computer to ground the static electrical charge before you pick up the circuit equipment.
- Pick up the device by holding it on the left and right edges only.
- Put on the strap of static-electricity-proof to avoid impacting the function during the equipment is operating.

Functional Description

The E1 SFP programming module is designed for an engineer to configure and check E1 SFPs parameters via a webpage before they can be installed in the real network for E1 service. It contains 2x Ethernet ports, 1x sub-D9 console port and 1x +5VDC power jack for connecting to an external power adaptor. It is intended for use with E1 SFP MS100070.

Technical Specifications

(1) Physical Dimension

Height: 29 mm

Width: 158 mm

Depth: 114 mm

Weight: 0.5 kg

(2) LAN and NMS Ethernet Interface

a. Compliant with 802.3/802.3u standards
b. 100 Base-TX with RJ45 connector
c. Full-duplex
d. Support Auto-negotiation
e. LED indicator for Ethernet: Link status and activity

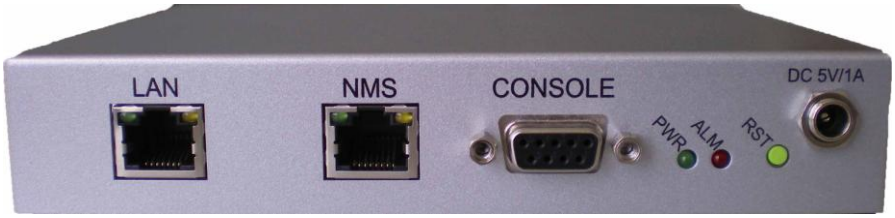
(3) Power Supply

a. +5 VDC Power Jack
b. Maximum Power Consumption: < 5 watts

(4) Operating Environment

a. Ambient temperature: 0 ~ 40 ℃ for indoor application
b. Storage temperature: 0 ~ 85 ℃
c. Relative humidity: 5 ~ 95% non-condensing

Front Panel



(1) System Indicators

PWR (Power on/off LED)

ALM (System failures/errors)

(2) Reset Button

Use this button to restart the system.

(3) LAN Ethernet Interface

The LAN interface is a RJ45 connector with two LED indicators. Two LED indicators are described below.

- **ORANGE LED**: Solid orange indicates Ethernet link is up.
- **GREEN LED**: Blinking green indicates Tx/Rx traffic is traversing the port.

(4) NMS Ethernet Interface

The NMS interface is a RJ45 connector with two LED indicators. Two LED indicators are described below

- **GREEN LED**: Solid green indicates Ethernet link is up.
- **ORANGE LED**: Blinking orange indicates Tx/Rx traffic is traversing the port.

(5) CONSOLE port

A RS232 interface with baud-rate 115200bps via DB9 (female)-to-DB9 (male) cable is provided for diagnostic. The user commands (CLI command) are listed in Table 1.

(6) +5VDC Power Jack

- Inner diameter: 2.0 mm
- Outer diameter: 5.6 mm
- Center Voltage Polarity: + (Positive)

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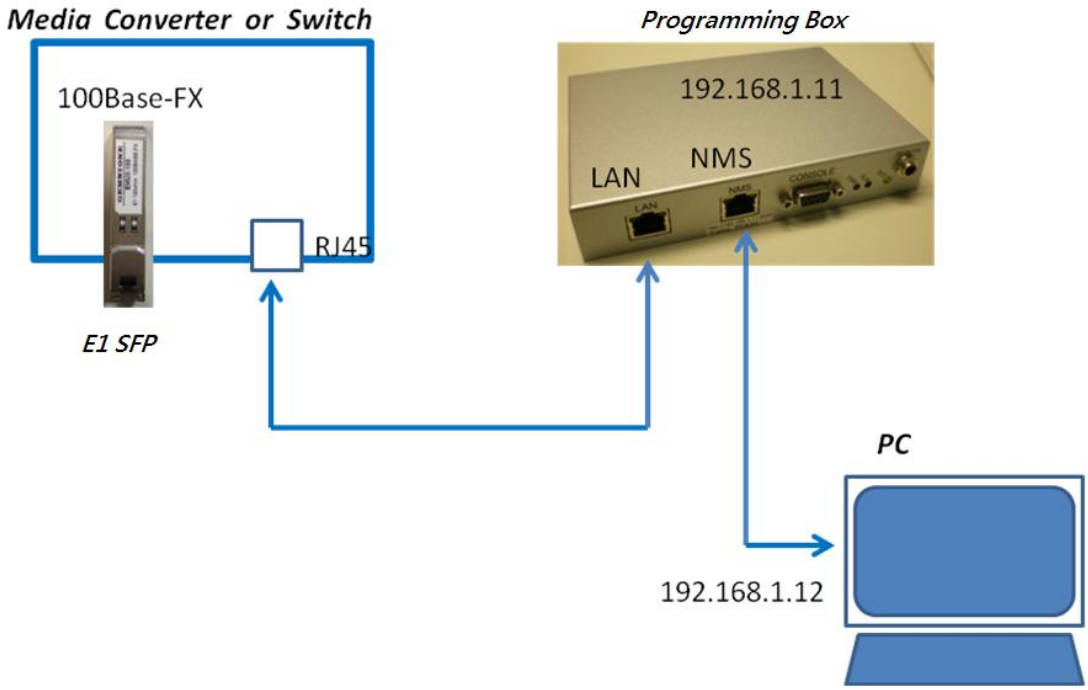
E1 SFP Configuration

I. Configuration Architecture



II. PC IP configuration

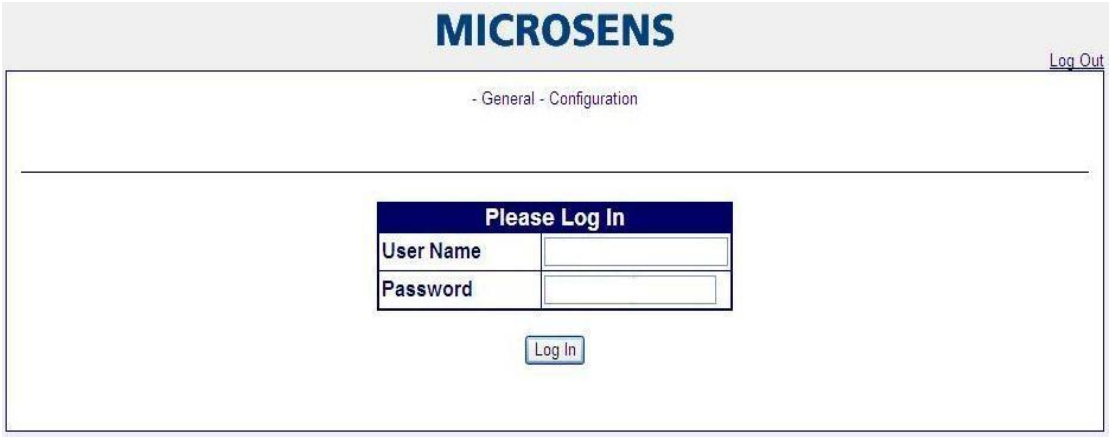
Before configuring E1 SFPs, please set your PC IP address as follows:

IP Address:	**192.168.1.12**
Subnet Mask:	**255.255.255.0**
Gateway:	**192.168.1.11**

III. E1 SFP Configuration

STEP I: Invoke the web browser and enter the following URL:

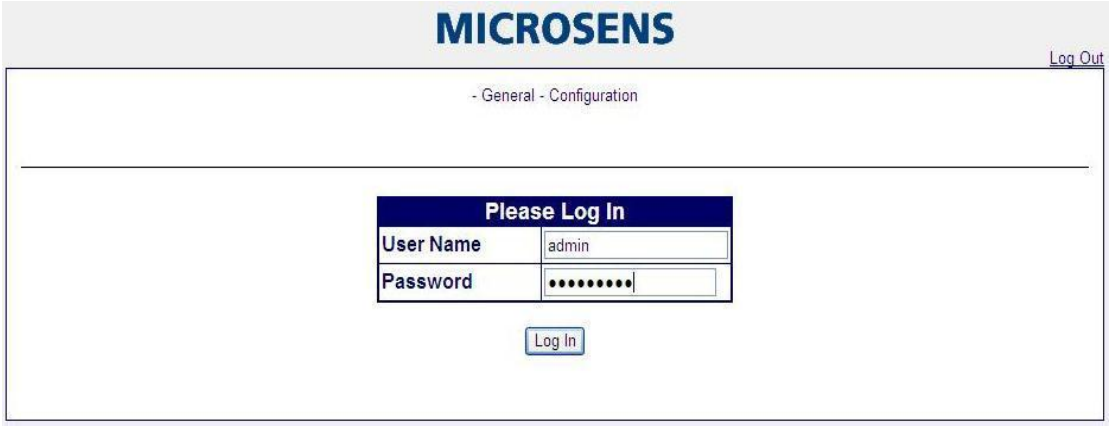
http\\:192.168.1.11:6868



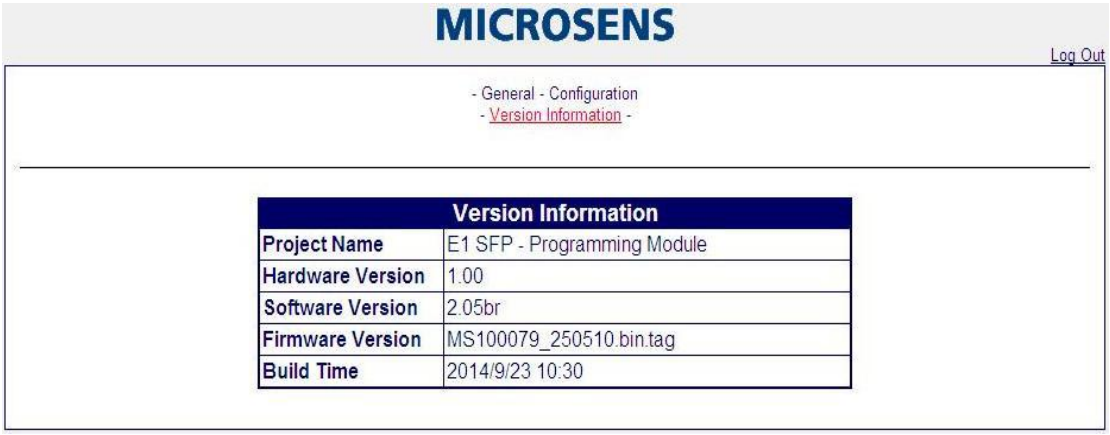
STEP II: Key in the user name & password

User name: **admin**

Password: **microsens**



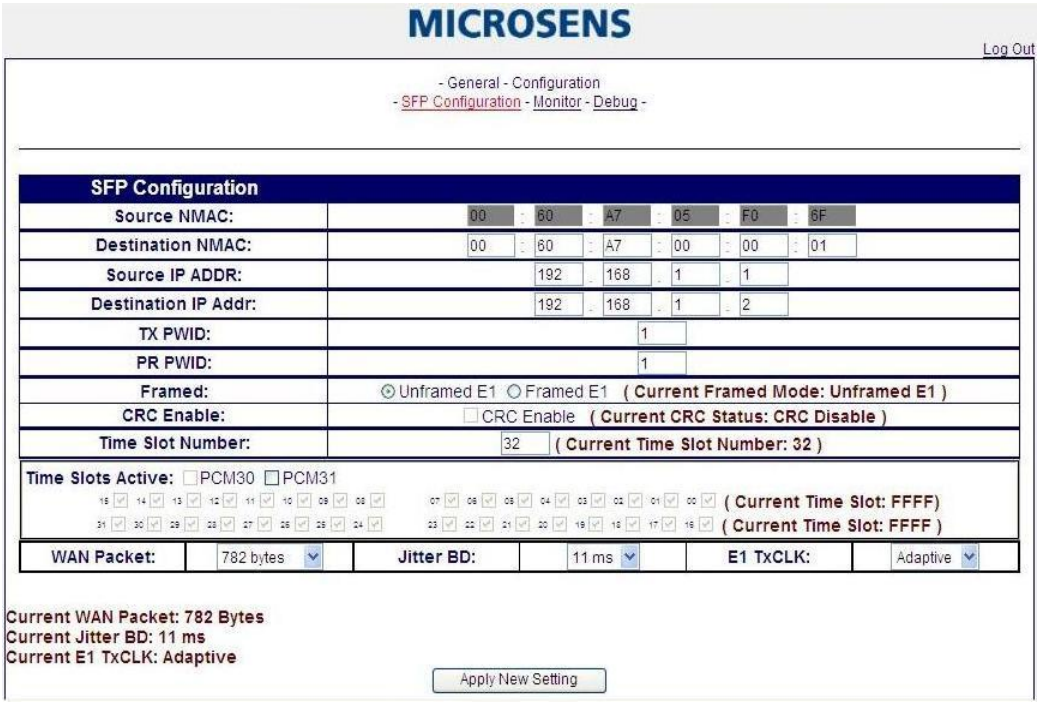
After clicking on the "Log In" button, the Version Information screen will be displayed.



STEP III: **Configuration → E1 SFP Configuration**

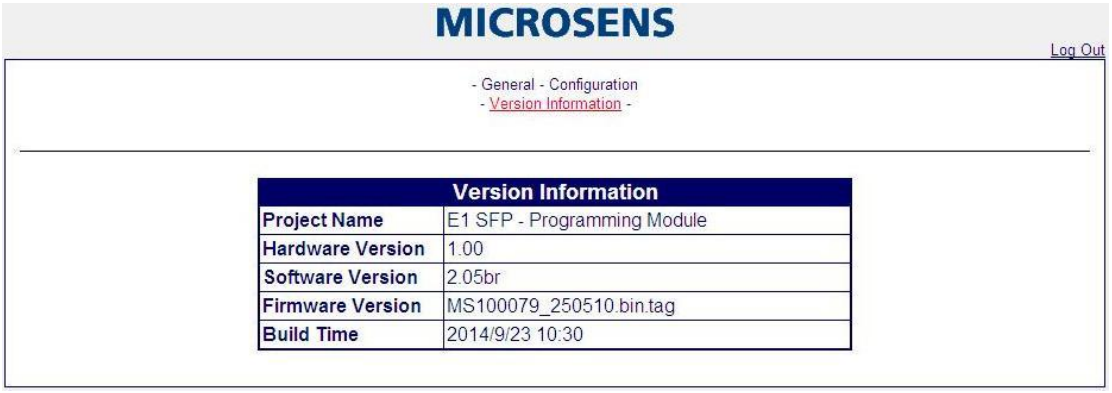
Move the mouse pointer over the "Configuration" name and click the "SFP Configuration" name.

The programming web page will get the current settings from the E1 SFP and display them on the screen. Once you've finished making changes, you need to commit them by clicking "**Apply New Setting**" button.

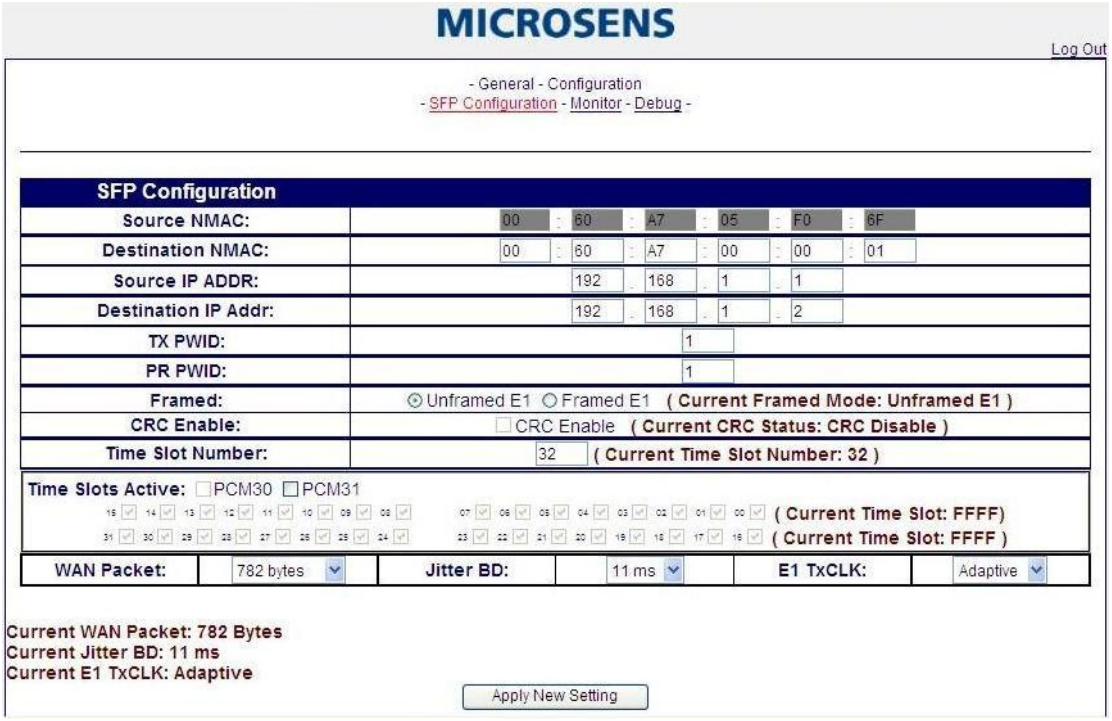


STEP IV: After saving new settings to the E1 SFP, the programming web page will go back to Home page.

Configuration → SFP Configuration



STEP V: Move the mouse pointer over the "Configuration" name and click the "SFP Configuration" name again. The programming web page will read back just saved parameters and display them on the screen. Please check if they are correct or not. If not, please repeat the above steps.



Command Line Interface for Setup

Hyper-terminal as Local Craft Terminal

When logging into the Hyper-terminal, set up the craft port as follows:

- **Bit rate: 115200bps**
- **Data bit: 8**
- **Parity: none**
- **Stop bit: 1**
- **Flow control: none**
- **Login password: microsens**

The CLI commands are summarized as follows:

Table 1 CLI Command Description

CLI Command	Description
version	Display software version and related information
cdisp	Display current configurations of the programming box.
ipset ip_addr net_mask gw_addr	Set NMS port IP address, subnet mask and gateway address. ip_addr: NMS port IP address to be assigned. net_mask: subnet mask of IP address. gw_addr: gateway IP address. Example: ipset 192.168.1.11 255.255.255.0 192.168.1.254
ipget	Display NMS port current IP address.
upgrade tftp_server_ip file_name	Upgrade software image from TFTP server tftp_server_ip: TFTP server IP address file_name: the file name of software image to be upgraded EX: upgrade 192.168.1.12 file_to_be_upgraded.bin
ping ip_addr	Use ICMP to check connection EX: ping 192.168.1.11
csave	Save current configurations to FLASH.
logout	Logout CLI System

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