

Product Specification

M2200TM 20dBm Output Power, 23dB Gain Dual EDFA for T&M

PN: FOA-M2200TM-EFG2C-AA061

Product Features

- Bench-top or rack-mountable dual EDFA in 1RU enclosure
- Web based GUI
- Remote software management and upgrade
- LabView and .NET Drivers
- Up to 20dBm output power
- Automatic Power Control (APC) or Automatic Gain Control (AGC) operating modes
- Flat gain spectrum at 23dB gain
- High-speed, high-performance transient suppression
- Class 1M* laser safety classification
- RoHS compliant



Applications

- Automated lab or manufacturing test-sets

The M2200TM EDFA is a micro-processor controlled EDFA for the C-band. It is optimized for a large input dynamic range while providing excellent noise performance and fast transient suppression, allowing the gain to be kept constant also when there are fast changes in input power.

Optical Specifications

Parameter	UoM	Min.	Typ	Max.	Notes
Number of EDFAs per unit		Two			
Wavelength Bandwidth	nm	1530		1564	
Input Power Range	dBm	-35		-3	
Output Power Range	dBm	-8		20	
Saturated Output Power	dBm	20			
Optimal Flat Gain (OFG)	dB		23		
Gain Flatness	dB		± 0.5	± 0.6	At OFG only
Gain Stability	dB			±0.10	
Gain Setting Accuracy	dB	-0.25		+0.25	
Noise Figure	dB			6	At OFG
Over/Undershoot	dB			±1	For 15dB add/drop, 100us
Transient Settling Time	µs			500	
In/Out Return Loss	dB	40			With pumps on
PDG+PDL	dB			0.3	
PMD	ps			0.3	
Power Measurement Accuracy	dB			±0.5	
Power Consumption	W			40	

Operation Modes

The amplifier can work in the following modes:

- Automatic Power Control (APC)
 - In this mode transient suppression algorithms are not used
- Automatic Gain Control

Communications and Control

Ethernet or RS232

Web based GUI

Optical Connections

The unit is equipped with two optical ports, as described in the table below

Port	Connector type	Note
Input 1	LC/UPC	Amplifier 1
Output 1	LC/UPC	Amplifier 1
Input 2	LC/UPC	Amplifier 2
Output 2	LC/UPC	Amplifier 2

Example GUI

A typical GUI snapshot can be seen in the figure below. The easy to use GUI is web-based and can be accessed using internet explorer by entering the IP address of the unit.

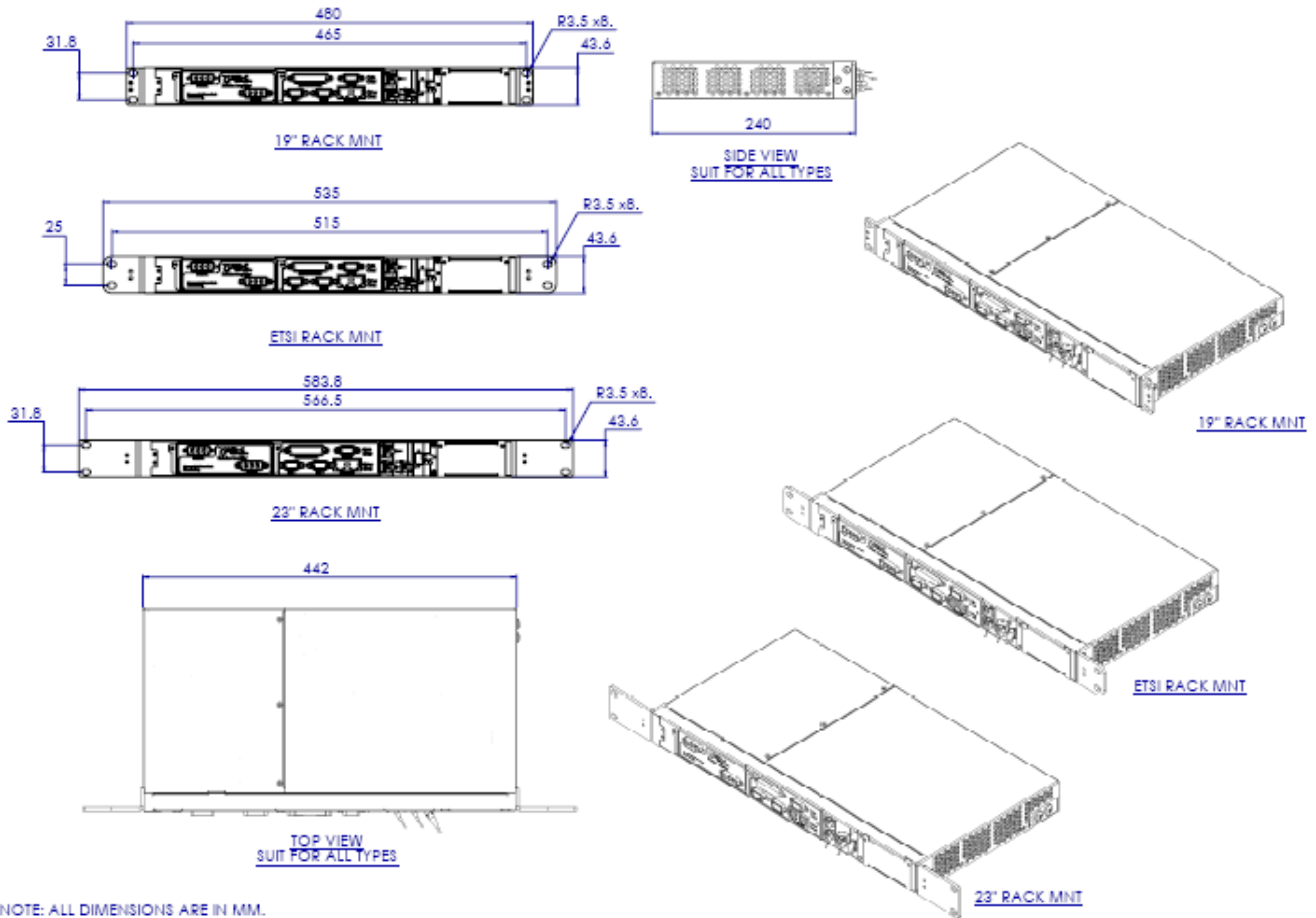
The screenshot displays the 'SNMP Management' web interface. It is divided into several sections:

- Configuration:** Includes 'Operating mode' (Auto Gain Ctrl), 'Manual Gain Set (dB)' (15.0), 'Amplifier Type Set' (Pre Amp), and 'Safety Switches & Thresholds' (Input Loss: Enabled, Input Loss Threshold: -31.0 dB).
- Status:** Shows overall 'Status: OK' and various operational metrics: Fans Status (OK), Internal Power Supply Status (OK), Pumps Status (Active), Internal Module Temp (25.5°C), 1U PCB Temp (23.6°C), Pump Temp (25.0°C), Gain (15.0 dB), EDFA Input Power (-5.1 dBm), Output Power (9.9 dBm), and Pump Current (63.6 mA).
- Edfa Alarms:** A list of seven alarm indicators, all shown as green circles, indicating no active alarms: Edfa On, Gain/Output limited, Output Loss, Input Loss, End-Of-Life, High Temperature, and Internal Power Supply.
- Production Parameters:** Lists hardware (H/W Rev: 01A, Date: Aug 13 2009), firmware (FW Ver: 745.0, SN: 23248), and software (EMS Rev: 0.11.0C, GUI Rev: 8.00) details.
- History since Reboot:** Shows 'Pumps Off' (0) and 'Eye Safety' (0).
- Communication:** Shows 'Connected' status.
- HSKU Command Status:** Shows 'Shutdown In' as OFF.
- Control Buttons:** Includes 'Reboot' and 'ON/OFF' buttons.

Environmental and Safety Information

Parameter	UoM	Min.	Typ	Max.	Notes
Operating Temperature Range	C	15		35	
Operating Relative Humidity	%	10		80	Non-condensing
Storage Temperature	C	-40		85	
Storage Relative Humidity	%	5		95	
Laser Safety Classification					Class 1M

Mechanical Specifications



Front panel connectors are shown in the picture below



Accessories Included

Accessory	Part Number
US AC Power Cable	1133098
EU AC Power Cable	1133099
Ethernet Cable	18-10-0138R

Ordering Information:



800 Village Walk #316
Guilford, CT 06437
Ph: 203-401-8093

Email orders to: sales@xsoptix.com
Fax orders to: 800-878-7282

Accessories Available

Accessory	Part Number
19" Bracket Kit	50-60-0102-01R
21" Bracket Kit	50-60-0103-01R
23" Bracket Kit	50-60-0104-01R
ETSI Bracket Kit	50-60-0105-01R
RS-232 Cable	18-10-0007R