

Product Specification

M2200TM 17dBm Output Power, 17dB Gain EDFA for T&M

PN: FOA-M2200TM-EFG1C-AA060

Product Features

- Benchtop or rack-mountable EDFA in 1RU enclosure
- Remote software management and upgrade
- Management application suite
- .Net based DLL for integrating EDFA control into users System
- Web based GUI
- LabView and .NET Drivers
- Up to 17dBm output power
- APC or AGC control modes
- Flat gain spectrum at 17dB 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
Wavelength Bandwidth	nm	1529.1		1564.2	
Input Power Range	dBm	-10		+12	
Input Monitor Range	dBm	-15		+13	
Output Monitor Range	dBm	-2		+18	
Saturated Output Power	dBm	17			
Optimal Flat Gain (OFG)	dB		17		
Gain setting	dB	5		18	Flat only at the OFG
Tilt Coefficient	dB/dB			0.85	Gain tilts by this factor for every dB from the OFG
Gain Flatness	dB			1.2	At OFG only
Noise Figure	dB			6.5	At OFG
Gain Stability	dB			±0.25	
Gain Setting Accuracy	dB	-0.25		0.25	
Steady State Error Band	dB			±0.25	
Transient Error Band	dB			±0.5	
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	
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
Input	LC/UPC
Output	LC/UPC

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 simply entering the IP address of the unit.

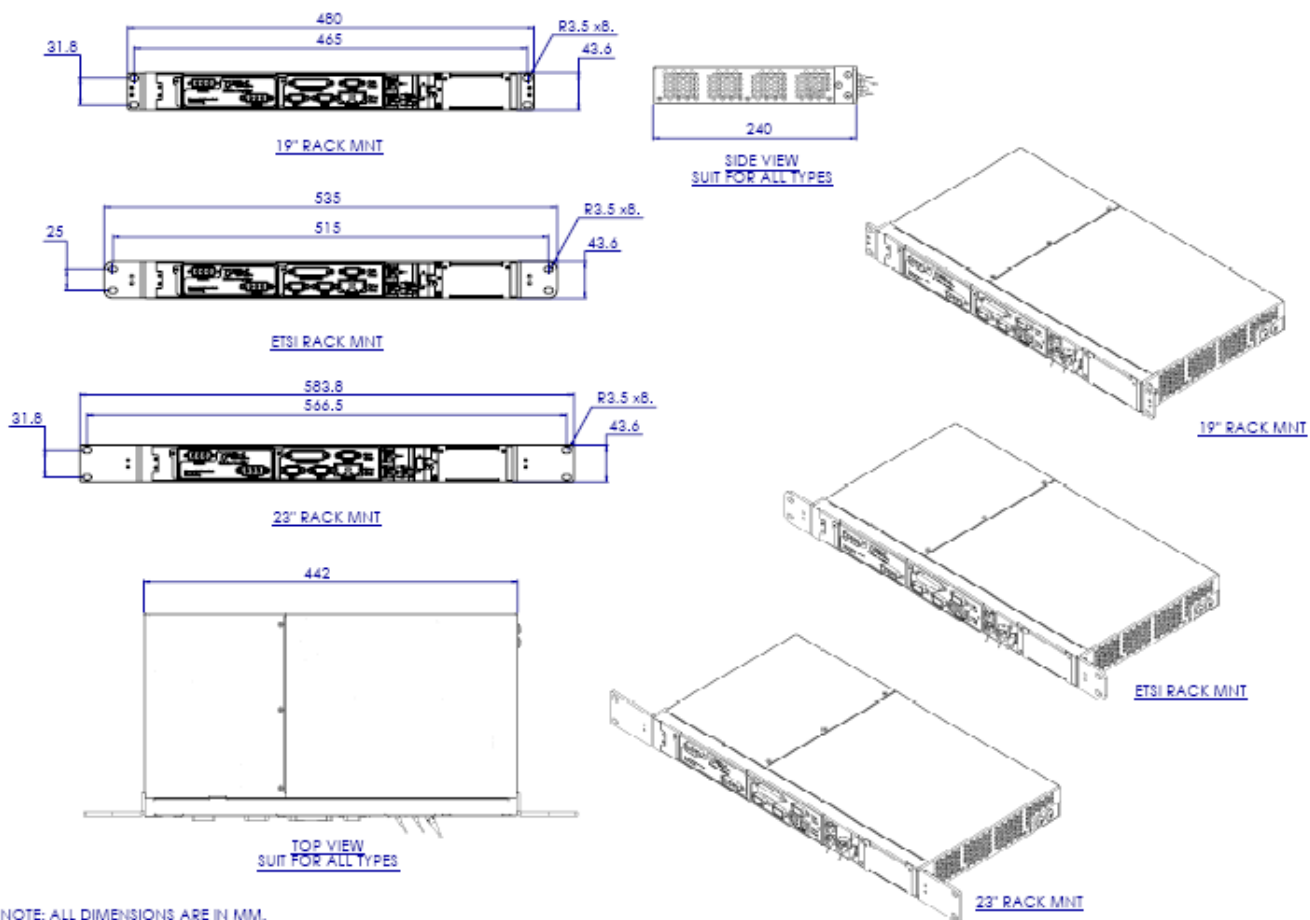
The screenshot displays a web-based GUI with a top navigation bar containing 'Main' and 'SNMP Management' tabs. The main content area is divided into several sections:

- Configuration:** Includes 'Operating mode' set to 'Auto Gain Ctrl', 'Manual Gain Set (dB)' at '15.0', 'Amplifier Type Set' at 'Pre Amp', and 'Safety Switches & Thresholds' with 'Input Loss' set to 'Enabled' and 'Input Loss Threshold (dB)' at '-31.0'.
- Status:** Displays various operational metrics: Status (OK), 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 alarms, all indicated as active with green status icons: Edfa On, Gain/Output limited, Output Loss, Input Loss, End-Of-Life, High Temperature, and Internal Power Supply.
- Production Parameters:** Shows hardware and software details: H/W Rev (01A), Date (Aug 13 2009), FW Ver (745.0), SN (23248), EMS Rev (0.11.0C), and GUI Rev (8.00).
- History since Reboot:** Shows 'Pumps Off' and 'Eye Safety' both at 0.
- Communication:** Indicates 'Connected' status.
- HSKU Command Status:** Shows 'Shutdown In' as 'OFF'.
- Reboot ON/OFF:** Includes buttons for 'Reboot' and 'ON/OFF'.

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