

# Fx - OVxxxx

OPTICAL AMPLIFIER FOR 1550 NM



## Application

- ▶ Amplification of 1550 nm optical signals on single mode fibers
- ▶ Output powers of 13... 25 dBm

## Features

- ▶ Erbium doped fiber amplifier technology
- ▶ 980 nm / 1480 nm pump laser diode(s)
- ▶ Constant gain or output power control

- ▶ Input and output monitors
- ▶ Optional measurement unit for SBS threshold of succeeding fiberoptic links (SBS detection)
- ▶ Dual, hot-plug-in power supply modules for 100...240 VA,  $\pm 36... \pm 72$  VDC or 23.5...24.5 VDC
- ▶ Ethernet - Web and -SNMP Interface (a-Version)
- ▶ RS232/RS485 control interface (b-Version)
- ▶ LC display
- ▶ General purpose I/O interface for remote functions
- ▶ LED status indication
- ▶ Very thin design, only 1 HU

## Technical Data

General		
Input signal wavelength	[nm]	1550 $\pm$ 10
Wavelength of pump lasers (typ.)	[nm]	980/1480
Optical return loss	[dB]	>40
Min. optical input level	[dBm]	-6
Max. opt. input level	[dBm]	+6
Gain flatness (at nom. gain and Pin = -10 dBm)	[dB]	-
Dynamic gain flatness (at nom. gain)	[dB]	-
Polarization dependent gain	[dB]	<0.2
Noise figure (@Pin=0dBm, $\lambda=1555$ nm)	[dB]	<5.0
Noise figure (@Pin=-10dBm, $\lambda=1550$ nm)	[dB]	-
Residual pump power (input and output)	[dBm]	<-10

**Fx-OVxxxx – standard EDFA - individual data for laser class 1M versions**

Opt. Output Power	[dBm]		
		Fx-OV1130	1 x 13.0±0.5
		Fx-OV2130	2 x 13.0±0.5
		Fx-OV4130	4 x 13.0±0.5
		Fx-OV6130	6 x 13.0±0.5
		Fx-OV8130	8 x 13.0±0.5
		Fx-OV8145	8 x 14.5±0.5
		Fx-OV3150	3 x 15.0±0.5
		Fx-OV4150	4 x 15.0±0.5
		Fx-OV6150	6 x 15.0±0.5
		Fx-OV1165	1 x 16.5±0.5
		Fx-OV2165	2 x 16.5±0.5
		Fx-OV3165	3 x 16.5±0.5
		Fx-OV4160	4 x 16.0±0.5
		Fx-OV1200	1x 20.0±0.5
		Fx-OV2210	2 x 21.0±0.5

**Fx-OVxxxx – standard EDFA - individual data for laser class 3B versions**

Opt. Output Power	[dBm]		
		Fx-OV1220	1 x 22.0±0.5
		Fx-OV1230	1 x 23.0±0.5
		Fx-OV1240	1 x 24.0±0.5
		Fx-OV1250	1 x 25.0±0.5

**Electrical and Mechanical Properties**

Opt. Connector		any type of high return loss connectors front or rear side mounted	
Optical fiber		standard singlemode 9/125 μm	
Climatic Specification		ETS 300 019, class 3.1	
Operation		ETS 300 019, class 1.2	
Storage			
EMI		EN50083-2 (April 1996) EN50083-2 /A1 (February 1998)	
Power Supply		100...240 VA	
Dual redundant, hot pluggable		±36...±72 VDC or 23.5...24.5 VDC	
Power Consumption	[W]	30 ... 60 W	
Enclosure		19" / 1 RU	
Weight	[kg]	9.7	