

Fx-OV16190-IP

VERY HIGH POWER OPTICAL AMPLIFIER FOR 1550 nm + WDM



Application

- ▶ Amplification of 1550 nm optical signals on single mode fibers
- ▶ Wavelength Multiplexing of RF video (CATV) and IP signals in FTTH PON Networks

Features

- ▶ 16 output ports with 19 dBm each @1550 nm (CATV)
- ▶ 1310&1490/1550nm WDM coupler at each output for multiplexing of bidirectional IP traffic
- ▶ Cladding-pumped ErYb-doped fiber amplifier technology
- ▶ 980 nm pump laser diodes
- ▶ Constant output power control

- ▶ Input and output monitors
- ▶ Dual, hot-plug-in power supply modules for 100 ... 240 VAC or $\pm 36 \dots \pm 72$ 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 2 HU
- ▶ OEM versions available

Technical Data

General

Port Numbers		1 input 1550 nm (CATV IN)
		16 in/out 1310&1490 nm (IP IN/OUT)
		16 in/out 1550+1310&1490 nm (CATV+IP IN/OUT)
Insertion loss IP traffic 1310&1490 nm	[dB]	≤ 1.0
Isolation 1310&1490 - 1550 nm	[dB]	> 15
Uniformity @ 1550 nm	[dB]	< 1.2
Operating wavelength	[nm]	1545~1565 (CATV) 1270~1350 & 1480~1505 (IP)
Optical output power @1550 nm	[dBm]	$16 \times 19 \pm 0.5$
Wavelength of pump lasers (typ.)	[nm]	< 1000 nm
Optical return loss	[dB]	> 45

Min. optical input level @1550nm	[dBm]	-5
Max. optical input level @ 1550nm	[dBm]	+10
Polarization dependent gain	[dB]	0.5
Noise figure (@Pin=0dBm, $\lambda=1550\text{nm}$)	[dB]	<5.5

Electrical and Mechanical Properties

Optical connector CATV input	E2000 or SC/APC
Optical connector IP in/out	SC/PC
Optical connector CATV&IP in/out	SC/APC
Optical fiber	standard singlemode 9/125 μm
Power consumption	< 45W
Climatic specification	
Operation	ETS 300 019, class 3.1
Storage	ETS 300 019, class 1.2
EMI	EN50083-2 (April 2006) EN50083-2 /A1 (February 1998)
Power supply	100 ... 240 VAC
Dual redundant, hot pluggable	or ± 36 ... ± 72 VDC
Enclosure	19" / 2 HU