

# Fx-OV08xxx-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

- ▶ 8 output ports with up to 20 .0 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
- ▶ Pump laser wavelengths < 1000 nm
- ▶ 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 1 HU
- ▶ OEM versions available

## Technical Data

### General

Port Numbers		1 input 1550 nm (CATV in)
		8 in/out 1310&1490 nm (IP in/out)
		8 in/out 1550+1310&1490 nm (CATV&IP in/out)
Insertion loss IP traffic 1310&1490 nm	[dB]	$\leq 1.0$
Isolation 1310&1490 - 1550 nm	[dB]	> 15
Uniformity @ 1550 nm	[dB]	< 1.2
Operating wavelength	[nm]	1545~1565 (CATV) 1270~1350 & 1480~1505 (IP)
Opt. output power @1550 nm	[dBm]	8 x 16.5 $\pm$ 0.5, 8 x 20.0 $\pm$ 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]	< 6.0

**Electrical and Mechanical Properties**

Optical connector CATV input	E2000 or SC/APC
Optical connector IP in/out	LC/PC or SC/PC
Optical connector CATV&IP in/out	LC/APC or SC/APC
Optical fiber	standard singlemode 9/125 $\mu\text{m}$
Power consumption	< 40W
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 $\pm 36 \dots \pm 72$ VDC
Enclosure	19" / 1 HU