

# 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,  $\pm 36 \dots \pm 72$  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

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