



||| A STEP AHEAD IN DIGITAL TELEVISION

# EDFA OPTICAL AMPLIFIERS

mod. **REA-20** mod. **REA-27**



EDFA FIBER OPTIC AMPLIFIER 1530 - 1565 nm

LOCAL CONTROL with KEYS and LCD DISPLAY

REMOTE CONTROL THROUGH SNMP and WEB

FULL DATA LOGGER ON BOARD

**ADVANCED  
TECHNOLOGY**

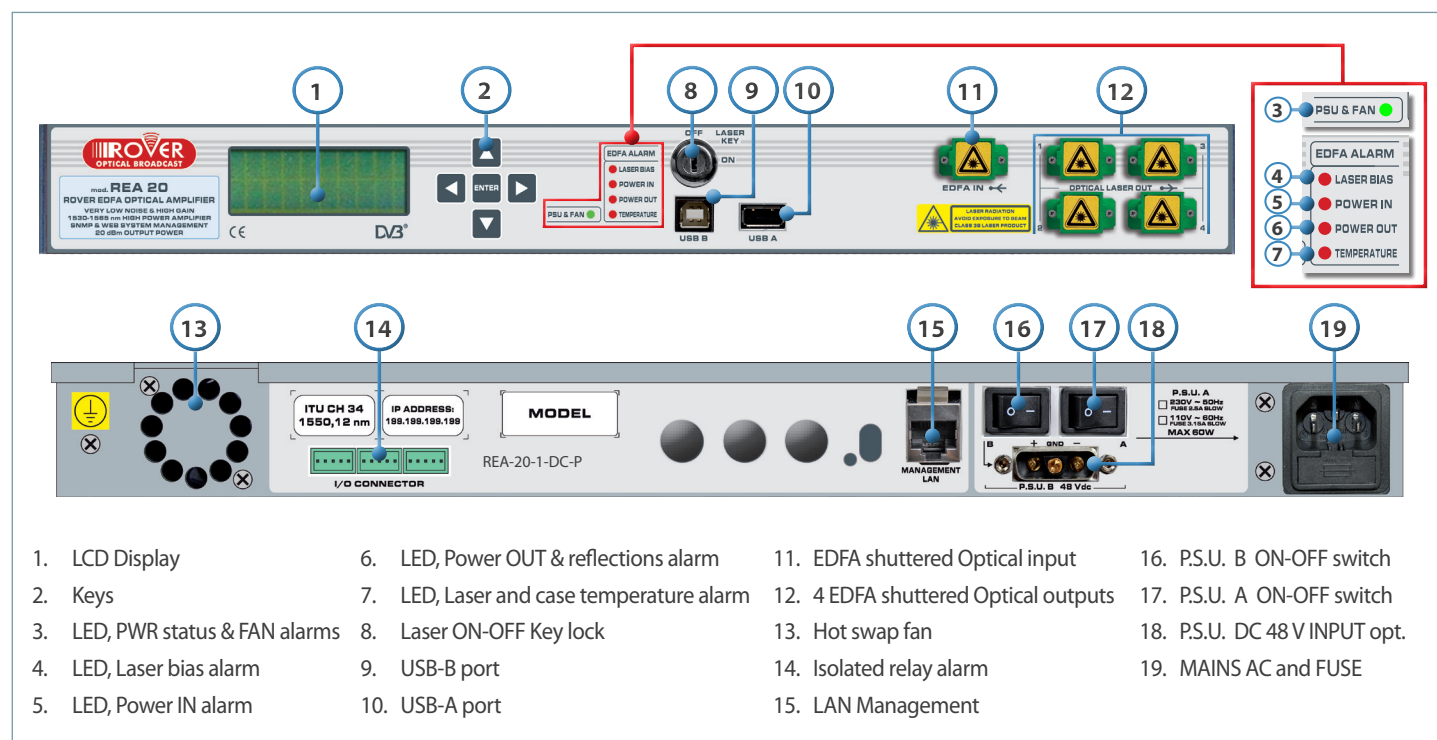
FOR PROFESSIONAL  
BROADCASTING  
NETWORKS

**DVB<sup>®</sup>**

MEMBER N.50490

*Product made in Italy by Irover Broadcast.com*

# EDFA OPTICAL AMPLIFIER



The “REAx” series is a family of High performance EDFA (Erbium Doped Fiber Amplifier); Designed for CATV long-distance transmission and large FTTH distribution networks (PON). A two or four way built-in optical splitter can be supplied (opt.).

Several Control Modes can be selected:

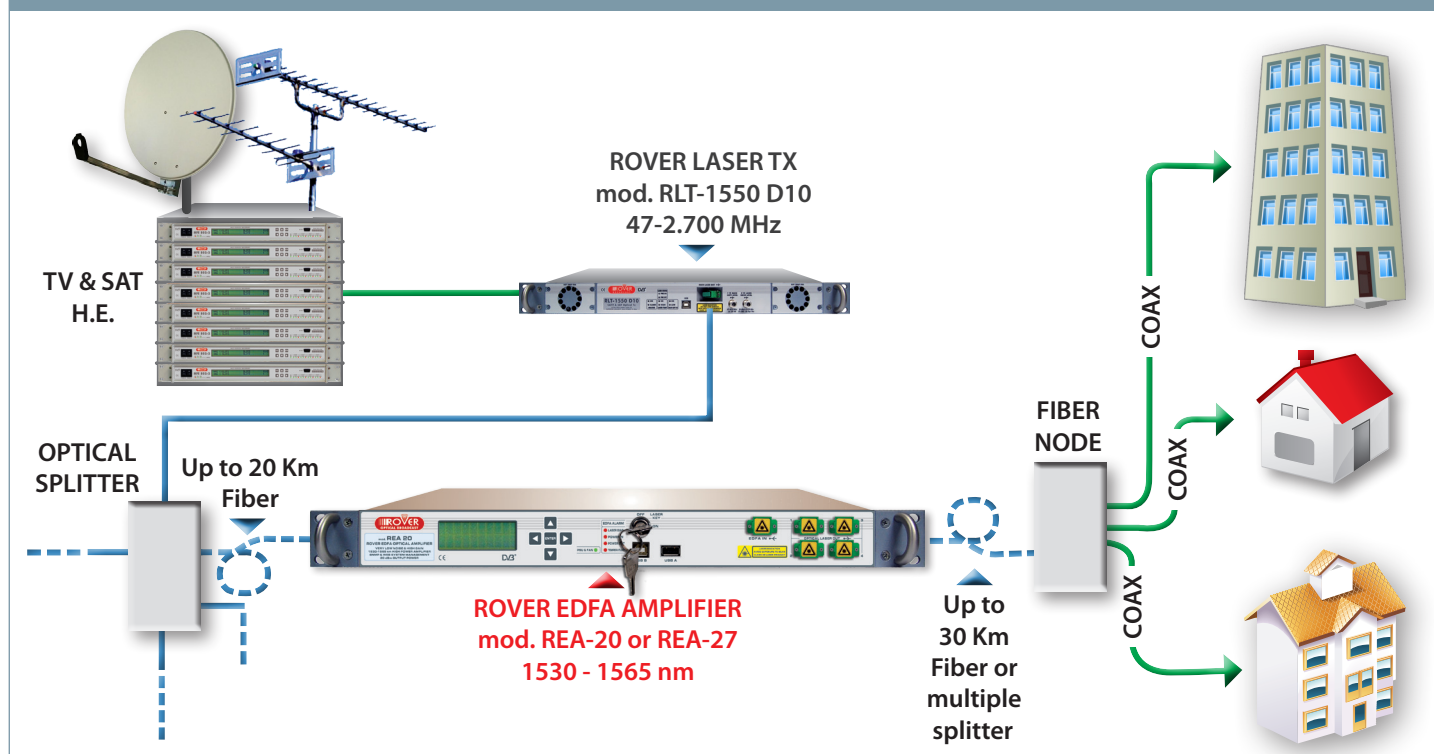
- APC Automatic Power Control (for CATV)
- AGC Automatic Gain Control
- ACC Automatic Current Control

Both Input and Output Signals are continuously sampled and monitored with feedback and alarms, through the SNMP and WEB browser interface.

There are several ways to set and verify Functions and Alarms:

- With keys and LCD display directly on the front panel.
- With WEB Browser through the LAN port.
- With SNMP through the LAN port.

## 47-2.700 MHz OPTICAL DISTRIBUTION EXAMPLE



## MAIN FEATURES

- High stability and high gain up to 28 dB
- High output power up to 20 dBm (or 27 dBm, REA-27)
- Front panel security Key Lock for Laser out
- Low noise 5 dB typ. at 0 dBm power input
- 1530 to 1565 nm high reliability Amplifier
- 980 nm high stability Laser Pump diode
- Selectable mode APC or AGC and ACC
- LCD Display and keys on the front panel
- Triple color LED for status indication and alarms
- Optical Input and Output power monitoring alarm
- Complete temperature, power, current, SBS, reflections, monitoring and alarms
- Built-in 2 or 4 way optical splitter (optional)
- SC/APC 8° shuttered optical connector
- USB port for easy SW up-upgrades
- LAN port for settings and full SNMP management
- LAN port for settings and Web Browser operation
- Redundancy Power Supply Unit, 1AC + 1DC or 2 AC (opt.)
- Very thin design, only 1 Unit 19" Rack

## TECHNICAL SPECIFICATIONS

### OPTICAL S. M.

- Input signal wavelength: 1530-1565 nm
- Wavelength of pump Laser: 980 nm
- Minimum Input power: - 10 dBm (typ. -15)
- Maximum Input power: 10 dBm
- Saturated Output power: 20 (or 27) dBm (+1/-2dB)
- Monitor power accuracy:  $\pm 0,5$  dB
- Total gain accuracy:  $\pm 0,5$  dB
- Noise figure at 0 dBm Input:  $5 \text{ dB} \pm 0,5 \text{ dB}$
- Input/Output Pump leakage:  $- 20 \text{ dB} \pm 5 \text{ dB}$
- Input/Output Return loss:  $> 40 \text{ dB}$
- Selectable mode: APC or AGC and ACC
- Input/Output Optical connector: Shuttered SC/APC
- Optical Single mode fiber: 0.9 mm / 125  $\mu\text{m}$

### ALARMS and MONITORING

- Loss of input power
- Loss of output power
- Pump laser current over limit
- High SBS or fiber reflections
- Pump laser temperature over limit
- Module case temperature over limit
- Redundant Power Supply and fans
- Triple color LEDs on front panel
- LCD Display and Keys on front panel
- Data Logger for status and alarms

### PERIPHERALS

- LAN ETHERNET 10/100 port: HTML WEB browser for local or remote settings, full SNMP for Monitoring, Alarms & Data Logger
- USB port: For easy SW up-grade & memory stick

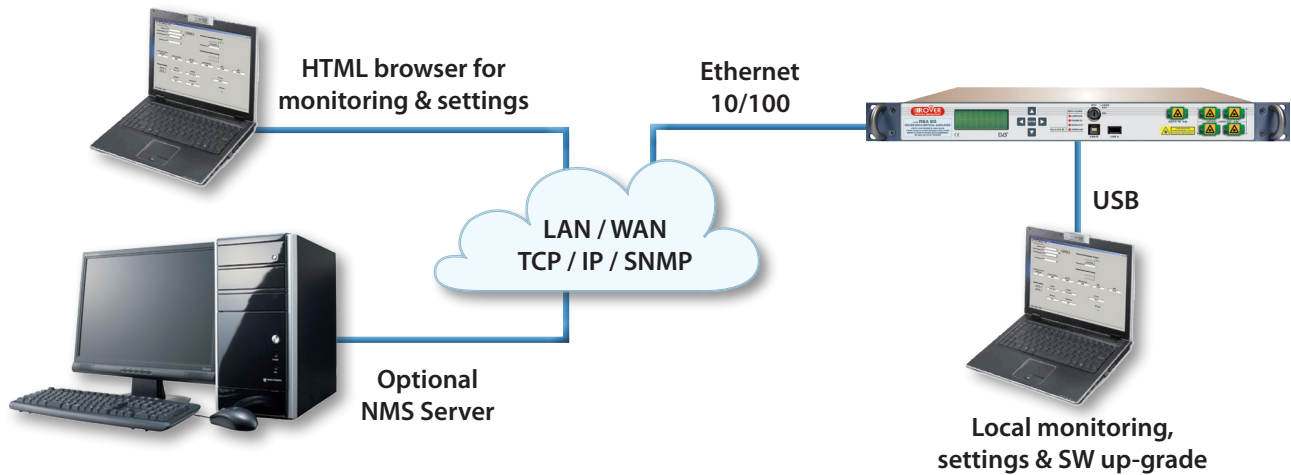
### GENERAL

- Power supply: AC 230 V or DC 48 V (opt.)
- Redundancy power supply: 1AC +1DC or 2 AC (opt.)
- Power consumption: 30 W
- Enclosure: 1 Unit 19" Rack
- Weight: 4 Kg
- Operating temperature:  $- 5$  to  $50^{\circ}$  (humidity 90%)
- Storage temperature:  $- 20$  to  $70^{\circ}$
- Equipment operating environmental conditions: Class 3,1 acc. ETS 300 019-1-3 (temperature controlled locations)

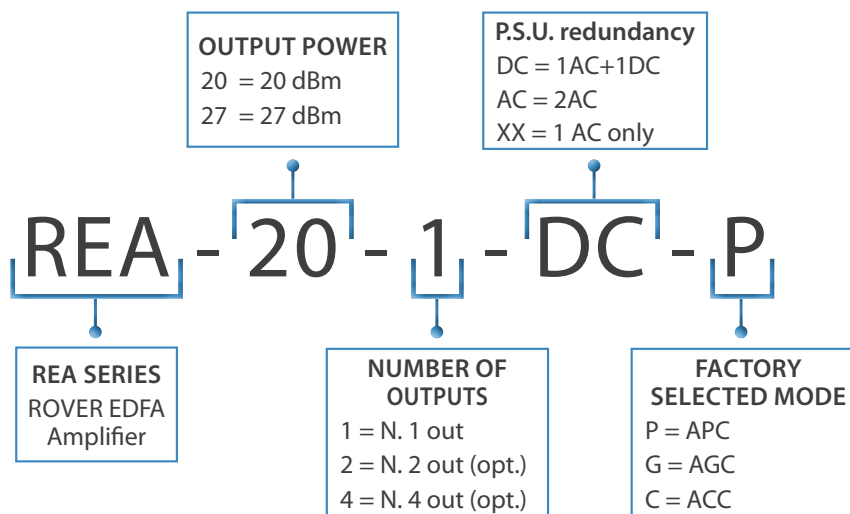
### SAFETY

- Safety: EN50083-1
- Laser safety: Class 3B, see yellow label on the panel
- Laser keylock: on front panel
- EMC: EN80083-2

## USB-LAN SNMP & WEB CONNECTIVITY



## ORDERING CODE DEFINITION



## ORDERING MODEL / CODE EXAMPLE

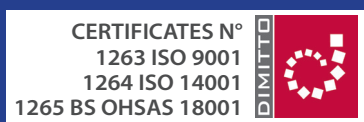
MODEL / CODE	DESCRIPTION	APPLICATION
REA-20-1-DC-P	EDFA Amplifier, 20 dBm total power, 1 optical output, opt. DC 48 V redundancy power supply (total 1AC+1DC), APC mode factory selected	Long distance CATV and Large FTTH PON network
REA-27-4-AC-P	EDFA Amplifier, 27 dBm total power, 4 optical output with 20 dBm power each output, opt. AC redundancy power supply (total 2 AC), APC mode factory selected	Long distance CATV and large FTTH PON network

## OPTIONS

ITEM	DESCRIPTION	CODE DEFINITION
P.S.U. REDUNDANCY	Second PSU 230 Vac (Max N. 2 AC)	AC
	Second PSU 48 Vdc (Max N. 1 AC + 1 DC)	DC
OPTICAL SPLITTER	2 way built-in optical splitter	2
	4 way built-in optical splitter	4

REA-EDFA Vf 19-1-16

Product made in Italy by Rover Broadcast.com



Specifications and features are subject to change without notice.

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