

OPA-25 Optical Pre-Amp

Avara's EDFA based Optical Pre-Amplifiers provide an efficient, cost-effective and reliable way to support long-haul PDH, SDH and Gigabit Ethernet transmission networks

The Avara optical pre-amplifier product is rack mountable unit with an integrated EDFA pre-amp pump for use in long haul optical transmission applications. These pre-amplifiers are designed for PDH, SDH, SONET and optical Ethernet transmission applications and has been developed to integrate with optical telecommunication equipment manufactured by any vendor.

This product is compliant to ETSI and Telcordia standards.

Applications

The Avara optical amplifiers can be used in applications to extend the range of equipment operating at 1550nm (C-band). Assuming a fibre loss of 0.22 dB/km, the booster in conjunction with the preamp can extend the range of a typical transmission system by up to 250km.

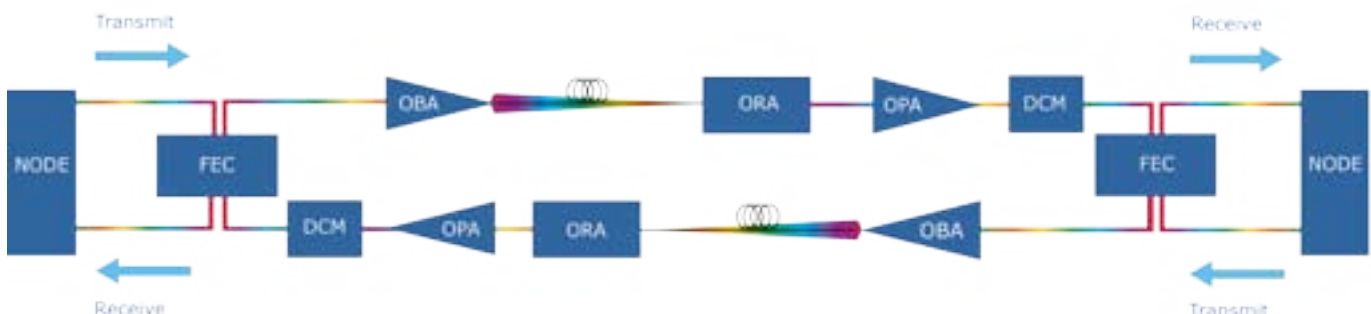
Technical Highlights

- Wide operating temperature range
- 19 inch rack mounting for easy installation
- 2 Rack Units height
- -20 to -70 VDC power supply
- Dry contact alarm outputs
- FC, SC & E2000 connector options available
- Built-in SNMP Agent
- Built-in Web Server for HTTP based management
- 25dB typical optical gain
- Optical input power level monitoring
- Optical output power level monitoring
- Temperature monitoring
- High reliability
- Low power consumption



Components for Long Haul Optical Fibre Link

Avara has a full range of optical modules, as per the diagram below, to meet various link budgets and performance targets including dispersion compensation.



- FEC** - Forward Error Correction Module
- OBA** - Optical Booster Amplifier
- ORA** - Optical RAMAN Amplifier
- OPA** - Optical Pre-Amplifier
- DCM** - Dispersion Compensation Module

Full individual brochures available for above products.

Technical Specifications



| | | | |
|---|--|--------------------------------------|--|
| Model Order Code | P21017.30 | Power | |
| Mechanical Height Depth Width | 90mm 280mm 440mm <i>measurements inclusive of mounting ears</i> | Power Supply | -20 to -70 VDC |
| | | Power Consumption | 17W |
| Parameter Operational Wavelength Optical Gain Input Power Range Noise Figure (Min Input Power) Optical Return Loss Polarisation Dependent Gain | 1550.12nm Typ. 25 -45 to -20, Typ -30 Typ 4.5 Typ. 45 Max 0.3dB | Environmental | |
| | | Operating Temp. Relative Humidity | -5°C to +55°C 5 - 90% (Non-condensing) |
| Management | SNMP, Web Server, Telnet | Standards | EN60950 Safety 41003 Laser Safety EN60825-1 Class 1 ETS 300 019 -1-1 Operational ETS 300 019 -1-2 Storage ETS 300 019 -1-3 Transport EN55022 Class A Emissions EN55024 Immunity Generic Immunity RFC1157 SNMP RFC1213 MIB II |



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