

Avara Optical Amplifiers provide an efficient, cost-effective and reliable way to deliver long-haul PDH, SDH and Giga bit Ethernet transmission solutions

OPTICAL AMPLIFIERS

Product

The Avara optical booster and pre-amplifier products are rack mountable Erbium Doped Fibre Amplifiers with integrated dispersion compensation for use in long haul optical transmission applications. These units 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.

The products provide integrated EDFA technology, compliant to ETSI and Telcordia standards.

Applications

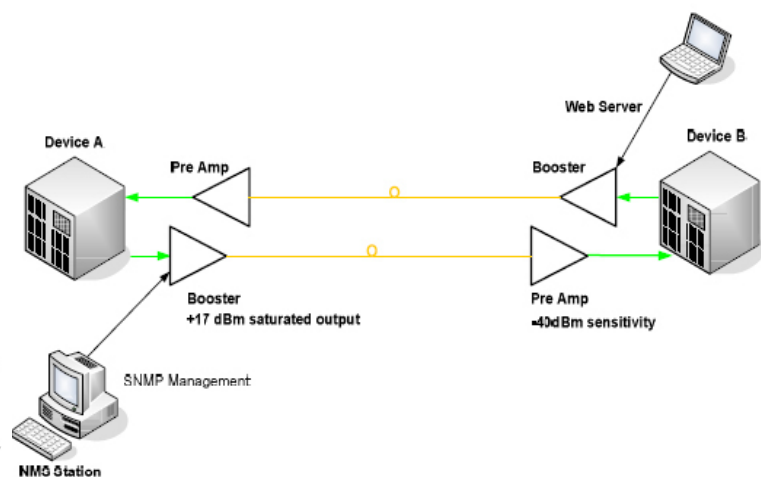
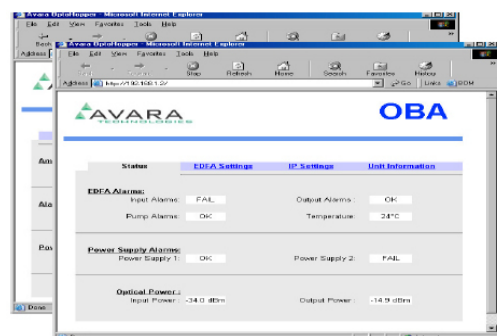
The Avara optical amplifiers can be used in applications to extend the range of equipment operating at 1550nm (C-band). Assuming a fibre loss of 0.22 dB/km, the booster in conjunction with the preamp can extend the range of a typical transmission system by up to 200km once typical losses are factored in.

Features

- Wide operating temperature range (-5 to 60 °C)
- 19 inch rack mounting for easy installation
- 2 Rack Units height
- 38 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
- Configurable output power in 1dB steps
- Optical input power level monitoring
- Optical output power level monitoring
- Temperature monitoring
- High reliability
- Single stage design
- Low power consumption



Optical Amplifier Family



TECHNICAL SPECIFICATIONS

Optical Booster Amplifier OBA-17					Environmental	
Parameter	Min	Typ	Max	Units	Operating Temp.	Relative Humidity
Bit Rate	-	-	2.5G	Bit/s	-5°C to +60°C	5 - 90% (Non-condensing)
Wavelength	1530	-	1565	nm		
Input Power Range	-6	-	3	dBm		
Saturated Output Power	+10 to +17 SW configurable in 1dBm steps					
Noise Figure (Power in = 0dBm)	-	5	-	dB		
Optical Gain	-	25	-			
Optical Return Loss	-	45	-	dB		
Polarisation Dependent Gain	-	-	0.3	dB		
Optical Pre-Amplifier					Standards	
Parameter	Min	Typ	Max	Units	EN60950 Safety	41003 Laser Safety
Operational Wavelength	1530	1550.12	1565	nm	EN60825-1 Class 1	ETS 300 019 -1-1 Operational
Optical Gain	-	25	-	dB	ETS 300 019 -1-2 Storage	ETS 300 019 -1-3 Transport
Input Power Range	-45	-30	-20	dBm	EN55022 Class A Emissions	EN55024 Immunity
Noise Figure (min input power)	-	4.5	-	dB	Generic Immunity	RFC1157 SNMP
Optical Return Loss	-	45	-	dB	RFC1213 MIB II	
Polarisation Dependent Gain	-	-	0.3	dB		
Management					Mechanical	
SNMP, Web Server					Height	90mm
Power					Depth	280mm
Power Supply	-38 to -72 VDC				Width	440mm
Power Consumption	20W				* These measurements are inclusive of the mounting ears	
Alarm Contacts					Models	
2x Relay outputs with current carrying capacity of 1A @ 24V					P21017.02: OBA-17	Optical Booster Amplifier, +17dBm output power, Managed
					P21017.30: OPA-25	Optical Pre-Amp, 25dB Gain, Managed



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