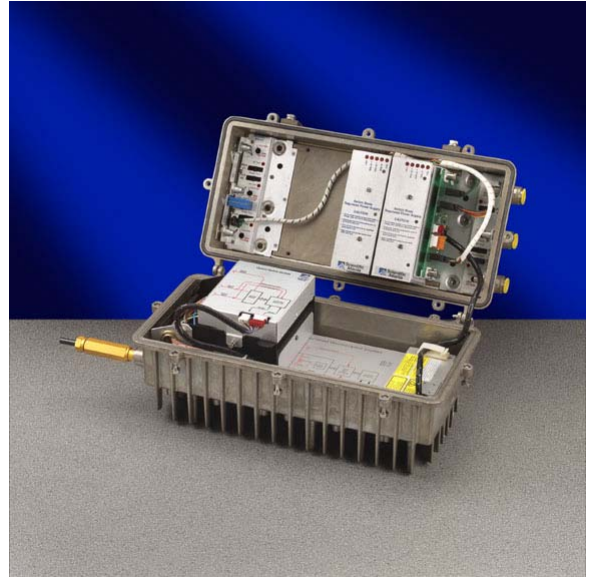


Prisma® 1550 nm Strand Mounted Optical Amplifier

Description

Designed for “Fiber Deeper” architectures, the Prisma® 1550 nm Strand Mounted Optical Amplifier (SMOA) is a high-powered EDFA (erbium doped fiber amplifier) that extends the reach and performance of networks without the need for a hub or remote terminal placement.

The SMOA enables a broadcast optical amplifier to be located on a strand or in an underground enclosure, thus eliminating the need for costly environmental cabinets. Encased in a rugged enclosure and optimized to operate from -40°C to $+65^{\circ}\text{C}$, the SMOA features optional redundant power supplies and a modular design that allows easy field upgrades of the amplifier module. The SMOA is available in three output levels, +17 dBm, +20 dBm, and +24 dBm.



Strand Mounted Optical Amplifier (SMOA)

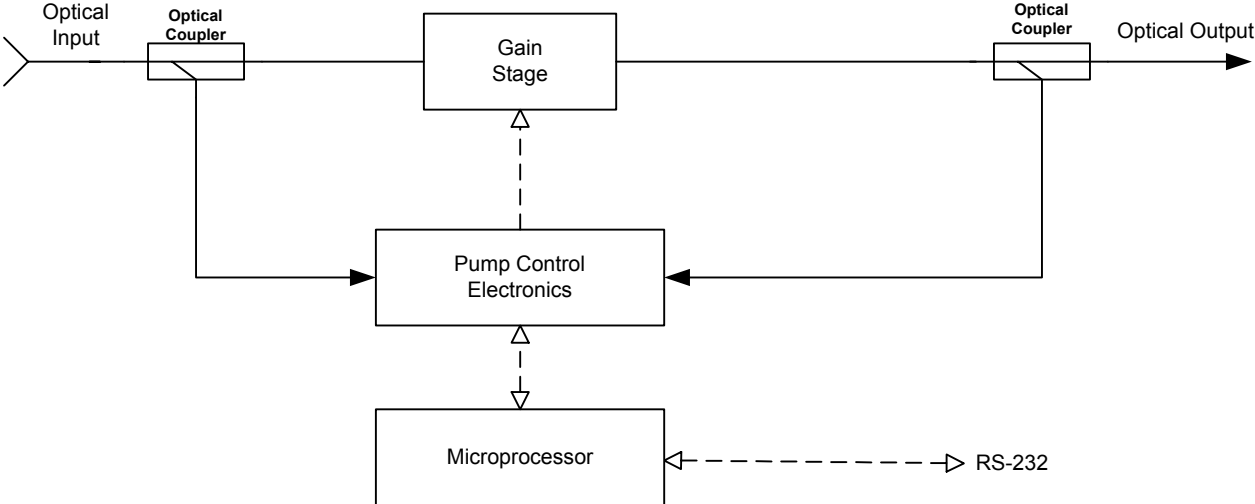
Features

- Operates over broad temperature range: -40°C to $+65^{\circ}\text{C}$
- Available with power supply redundancy
- High Optical Power levels: +17 dBm, +20 dBm, or +24 dBm
- Optional optical switch for input signal redundancy
- Optional internal 1x2, 1x3, or 1x4 optical output splitter
- User set-up through Local Craft Interface (LCI)
- Remote monitoring via Transmission Networks Control System (TNCS)



Prisma - 1550 nm Strand Mounted Optical Amplifier

Block Diagram



Prisma 1550 nm Strand Mounted Optical Amplifier

Specifications

Optical	Units		Notes
Total Output Power Options (at +5.0 dBm input power)	dBm	+17.0 ± 0.5 +20.0 ± 0.5 +24.0 maximum	1,2
Input and Output Interface		SC/APC adapter	
Wavelength	nm	1530 to 1565	
Return Loss	dB	-50 maximum	
Operational Input Power			
Full Specifications	dBm	>0	
Functional	dBm	>-10	
Noise Figure			
+17 dBm output	dB	< 5.0 with +5 dBm input	
+20 dBm and +24 dBm output	dB	< 5.5 with +5 dBm input	

Electrical	Units		Notes
Operational Temperature Range	°C	-40 to +65	
	°F	-40 to +149	
Storage Temperature	°C	-40 to +85	
	°F	-40 to +185	
Relative Humidity	%	5 to 95	
Power Requirements @ 60 Hz	V AC	60	
	V AC	90	
Power Consumption (maximum)	W	< 50	
Power Stability	%	± 5	

Mechanical	Units		Notes
Physical Dimensions			
Depth	in.	10.0	
	cm	25.4	
Width	in.	20.5	
	cm	52.1	
Height	in.	10.0	
	cm	25.4	
Weight	lb	36.5	
	kg	16.6	

Notes:

- Contact Applications Engineering for performance at other input power levels.
- Represents total output power prior to optical splitter.

Unless otherwise noted, specifications are based on measurements made in accordance with NCTA Practices for Measurements made on Cable Television Systems using standard frequency assignments.

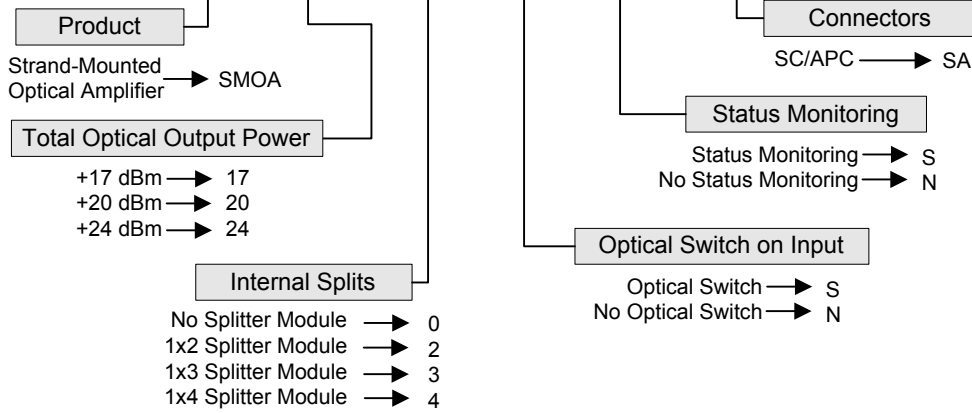
Prisma 1550 nm Strand Mounted Optical Amplifier

Ordering Information

Sample

S	M	O	A	-	1	7	-	0	-	N	-	N	-	S	A
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S	M	O	A	-			-		-		-	N	-	S	A
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Related Equipment

	Part Number
Redundant Power Supply	590902
Fiber Optic Service Cables	See Data Sheet #739273

For information on other Prisma Family Products please refer to the following documents:

Prisma II Platform
 Prisma II 1550 nm Transmitter
 Prisma II 1550 nm Optical Amplifiers
 Prisma II Receivers
 Prisma II 1550 nm Supertrunk Link

Prisma II Data Sheet Part Number 739199
 Prisma II Data Sheet Part Number 739200
 Prisma II Data Sheet Part Number 739202
 Prisma II Data Sheet Part Number 739203
 Prisma II Data Sheet Part Number 748710



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