

# SL-Transcend

## EDFA Optical Amplifier Modules

The Sealight TranScend EDFAs offer a cost-effective solution to increase fiber reach in various CATV architectures. When used in conjunction with the Sealight SL-Chromadigm series of transmitters, they offer unprecedented performance at a very attractive price point.

The TranScend EDFA series are offered in a range of output ports and power levels. Other features include express ports for reducing fiber interconnect and a gain flattened version. All the EDFA modules are also available in a hardened version for extreme temperature operation.

### Key Benefits

- Modular, space-efficient and flexible configurations
- Up to 16 ports in a 1RU SL-TranScend chassis configured with four EDFA modules
- Up to 18 dBm per port output power
- Hardened EDFA modules available for extreme operating temperatures of -20°C to +75°C



SL-Transcend EDFA

### Applications

The high performance Sealight EDFAs has been deployed for numerous applications:

- Node segmentation
- Distribution networks
- RFoG applications
- FTTx networks
- Long haul super-trunking

### Features

- Four compact modules in a single SL-TranScend TSD-CH-DC chassis
- Multi-output options single, dual and quad outputs
- 4.5 dB noise figure, optimized for CATV applications
- Gain flattened options available
- Dedicated express ports reduce fiber interconnections
- SNMP remote monitoring



EDFA Optical Amplifier (front view)

## Specifications

EDFA PERFORMANCE		
EDFA NOISE FIGURE	< 4.5 dB	
OPTICAL OUTPUTS <sup>(1)</sup>		
NUMBER OF OUTPUTS	1, 2 or 4	
OUTPUT POWER PER PORT	See Available Configurations	
OUTPUT POWER REDUCTION WITH EXPRESS PORT <sup>(2)</sup>	< 1 dBm	
OUTPUT POWER VARIATION OVER TEMPERATURE	+ 0.2 dB	
AMPLIFICATION WAVELENGTH	1545-1562nm	
OPTICAL INPUT		
OPTICAL INPUT POWER LEVEL <sup>(3)</sup>	-6 to +10 dBm	
EXPRESS PORT		
PASSBAND	1544-1559nm	
REFLECT BAND	1300-1620nm	
INSERTION LOSS	< 0.6 dB	
USER INTERFACE		
FRONT PANE	LCD Display with Menu Switch Key	
REAR PANEL	OPTICAL INPUT CONNECTORS	SC/APC
	OPTICAL OUTPUT CONNECTORS	SC/APC or LC/APC
	EXPRESS PORTS	LC/APC
NETWORK MANAGEMENT	SNMP V2	
POWER		
POWER CONSUMPTION	15W	
AC VOLTAGE SUPPLY RANGE	85-240 VAC	
DC VOLTAGE SUPPLY RANGE	42-56 VDC	
ENVIRONMENTAL		
OPERATING TEMPERATURE	STANDARD	0°C to +50°C (+32°F to +122°F)
	HARDENED	-20°C to +75°C (-4°F to +167°F)
STORAGE TEMPERATURE		-40°C to +85°C (-40°F to +185°F)
HUMIDITY		Max. 85% Non-condensing
PHYSICAL		
DIMENSION		1.6"H x 2.75"W x 10.0"D (4.06H x 7.0W x 25.4D cm)
Weight		< 1.0 lbs (0.45 kg)

### NOTES:

- (1) Measured at 0 dBm input power.
- (2) When the express port is built-in, the output power requirement in the RFoG network is reduced and the EDFA O/P is reduced to reflect this reduced power requirement.
- (3) The amplifier will show slight CNR and output power variations over this range of optical input power. For minimal CNR impact, an input power of +4 dBm is recommended. Amplifiers may shut down at input optical powers below -3 dBm to prevent excessive noise at the output.

## Available Configurations

One Port at: 15, 18, 19 or 20 dBm

Two Ports at: 12 or 21 dBm

Four Ports at: 10, 15 or 18 dBm

All EDFAs are available as an option for hardened -20°C to +75°C operating environment.

All EDFAs are available with express ports as an option. The standard two-port EDFAs have express ports built-in.

Single 18 dBm band flattened EDFA is available as an option.

### NOTE:

Other configurations available on request.