



## EDFA Optical Amplifier Modules:

### Applications:

The high performance ATX EDFA has been deployed for numerous applications:

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

### Features:

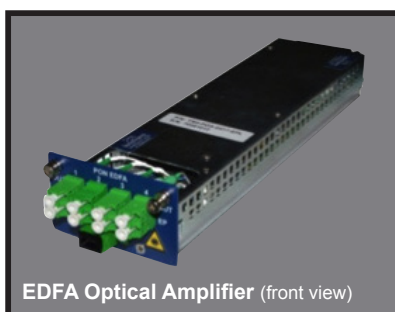
- ▶ Four compact modules in a single TranScend TSD-CH-DC chassis
- ▶ Multi-output options single, dual & quad outputs
- ▶ 4.5 dB noise figure, optimized for CATV applications
- ▶ Gain flattened options available
- ▶ Dedicated express ports reduce fiber interconnections
- ▶ SNMP remote monitoring

### Key Benefits:

- ▶ Modular, space-efficient & flexible configurations
- ▶ Up to 16 ports in a 1RU 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

The ATX TranScend EDFAs offer a cost-effective solution to increase fiber reach in various CATV architectures. When used in conjunction with the ATX 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 & power levels. Other features include express ports for reducing fiber interconnect & a gain flattened version. All the EDFA modules are also available in a hardened version for extreme temperature operation.



## EDFA Optical Amplifier Modules:

### EDFA Optical Amplifier Specifications

SPECIFICATIONS		
<b>EDFA PERFORMANCE</b>		
EDFA NOISE FIGURE		< 4.5 dB
<b>OPTICAL OUTPUTS<sup>(1)</sup></b>		
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
<b>OPTICAL INPUT</b>		
OPTICAL INPUT POWER LEVEL <sup>(3)</sup>		-6 to +10 dBm
<b>EXPRESS PORT</b>		
PASSBAND		1544-1559nm
REFLECT BAND		1300-1620nm
INSERTION LOSS		< 0.6 dB
<b>USER INTERFACE</b>		
FRONT PANEL		LCD Display with Menu Switch Keys
REAR PANEL	OPTICAL INPUT CONNECTORS	SC/APC
	OPTICAL OUTPUT CONNECTORS	SC/APC or LC/APC
	EXPRESS PORTS	LC/APC
NETWORK MANAGEMENT		SNMP V2
<b>POWER</b>		
POWER CONSUMPTION		15W
AC VOLTAGE SUPPLY RANGE		85-240 VAC
DC VOLTAGE SUPPLY RANGE		42-56 VDC
<b>ENVIRONMENTAL</b>		
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
<b>PHYSICAL</b>		
DIMENSIONS		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)
<b>NOTES:</b>		
(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 & the EDFA O/P is reduced to reflect this reduced power requirement.		
(3) The amplifier will show slight CNR & 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

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.
<b>NOTE:</b> Other configurations available on request.

Specifications subject to change without notice.

