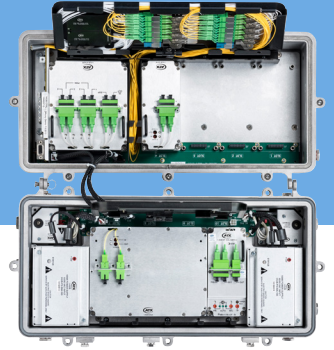


I-HUB



EDFA Optical Amplifier Modules:

Applications:

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

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

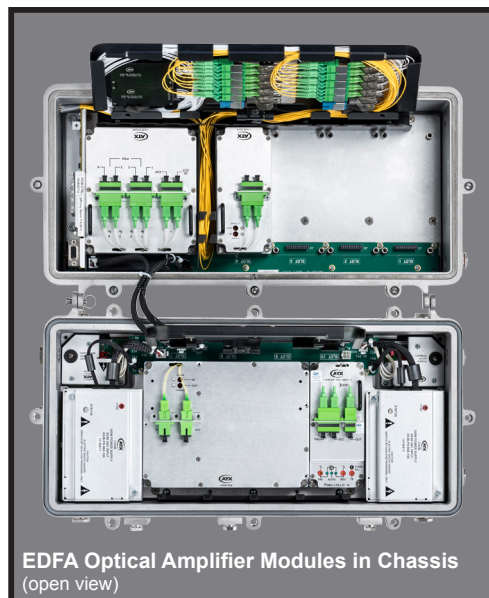
Features:

- ▶ Wide range of EDFA modules optimized for CATV, FTTx & RFoG
- ▶ Low noise figure
- ▶ Multiple gain & output power options
- ▶ Express port options to reduce fiber interconnections
- ▶ SNMP remote status monitoring

Key Benefits:

- ▶ Wide variety of application optimized EDFAs:
 - ▶ DSAs incorporate dual-stage EDFAs with interstage dispersion compensation for highest performance in long reach, multi-wavelength applications
 - ▶ GCAs for cost-effective, typical reach, multi-wavelength applications
 - ▶ POAs for FTTx (PON overlay or RFoG) providing four outputs per EDFA
- ▶ Each EDFA family type includes:
 - ▶ Low noise figure design
 - ▶ Multiple gain versions
 - ▶ Multiple total output power versions
 - ▶ +/- 0.2 dB output power stability
- ▶ Ruggedized, temperature hardened design
- ▶ Express port options to improve network design efficiency & maintainability

The I-HUB family of ruggedized EDFAs includes versions optimized for a wide variety of CATV & FTTx applications requiring a field deployable (strand, pedestal or vault) solution. Depending upon the application, ATX's I-HUB platform which has a 10 single-slot capacity, supports CATV super-trunking, multi-wavelength per fiber distribution, hub eliminations, node segmentation, RFoG service area creation, & RF overlay for PON networks.



EDFA Optical Amplifier Modules in Chassis
(open view)

EDFA Optical Amplifier Modules:

EDFA Optical Amplifier Module Specifications

SPECIFICATIONS		DSA	GCA	POA
I-HUB EDFA OPTIONS				
APPLICATION		Multi-wavelength	Multi-wavelength	Single Wavelength, PON Overlay
OUTPUT PORTS		1	1	4
OPTICAL PERFORMANCE				
BANDWIDTH ⁽¹⁾		1530-1562nm		
INPUT POWER	MINIMUM	-7 dBm		
	MAXIMUM ⁽²⁾			
NOISE FIGURE ⁽³⁾		< 4.5 dB		
GAIN OPTIONS		6, 9 or 12 dB	6, 9 or 12 dB	
POWER PER PORT ⁽⁴⁾		15, 18 or 20 dBm	15, 18 or 20 dBm	7, 10, 14 or 17 dBm
OUTPUT POWER VARIATION OVER TEMPERATURE ⁽⁵⁾		± 0.2 dB		
EXPRESS PORT				
AVAILABILITY		Optional		
CONNECTOR TYPE		SC/APC	SC/APC	LC/APC
OPTICAL BANDWIDTH		1530-1562nm		
REFLECT BAND		1300-1620nm		
INSERTION LOSS		< 0.6 dB		
NETWORK MANAGEMENT		SNMP V4		
POWERING				
POWER CONSUMPTION		9W	9W	18W
INPUT POWER RANGE		60-90 VAC		
ENVIRONMENTAL				
OPERATING TEMPERATURE		-40°C to +65°C (-40°F to +149°F)		
STORAGE TEMPERATURE		-40°C to +85°C (-40°F to +185°F)		
HUMIDITY		Max. 85% Non-condensing		
PHYSICAL				
DIMENSIONS		5.77"H x 7.56"W x 2.07"D (14.66H x 19.2W x 5.26D cm)	5.77"H x 2.5"W x 2.07"D (14.66H x 6.35W x 5.26D cm)	5.77"H x 5.03"W x 2.07"D (14.66H x 12.78W x 5.26D cm)
WEIGHT		2.0 lbs (0.91 kg)	0.5 lbs (0.23 kg)	1.0 lbs (0.45 kg)
INPUT CONNECTOR TYPE		SC/APC		
OUTPUT CONNECTOR TYPE		SC/APC	SC/APC	LC/APC
NOTES:				
(1) Optical bandwidth is reduced to 1545-1562 when input express port option is utilized.				
(2) Maximum input power equals total optical power out minus gain.				
(3) Measured at 0 dBm input power.				
(4) Express port option reduces output power by specified insertion loss.				
(5) GCA model includes optical AGC.				

Ordering Information

Part Number	Description
IHUB-DSA*-****-C	I-HUB Field-hardened Dual-stage EDFA with 20-40 km of Dispersion Compensation, 6, 9, or 12 dB of Gain & +15, +18, or +20 dBm Total Output Power using SC/APC Connectors in a Three-slot Module.
IHUB-GCA-****S-C	I-HUB Field-hardened EDFA with AGC, 6, 9 or 12 dB Gain & +15, +18 or +20 dBm Total Output Power using SC/APC Connectors in a Single-slot Module.
IHUB-POA-4X*-1EL	I-HUB Field-hardened PON EDFA Module provides Four Optical Outputs each with an Express Port at +7, +10, +14 or +17 dBm Single Wavelength Output Power using SC/APC Input, LC/APC Output & Express Port Connectors in a Two-slot Module.

Specifications subject to change without notice.

