

The Titan pluggable EDFA module for the OTC chassis is a high performance optical amplifier for 1550nm optical transmission networks. It is available in four models to provide optical output power from 13 to 22dB and features optical power control for extremely stable operation across a wide input power. It is a member of the Titan OTC (Optical Transport Chassis) product family that includes RFoG and HFC return path receivers, 1310nm and 1550nm CATV transmitters along with the 14 slot OTC chassis. The Titan EDFA module houses one complete independently managed optical amplifier in a single slot wide case allowing a single Titan OTC chassis to support up to 14 distribution networks in a small 4RU head-end equipment space. This hot swappable module features front panel key switch, diagnostics and supports SNMP for remote monitoring.



Features and Benefits

- Low Noise, high performance for the highest video quality.
- Automatic power control guarantees a constant optical output even if input varies.
- Very stable, high quality design to insure years of trouble free service.
- Remote management using SNMP allows easy integration to standard operations systems.
- Optional output power selections support a wide variety network configurations.
- Front panel status indicators and hot-swappable design for easy diagnostics & maintenance.
- Keyed laser shut-down switch allows safe maintenance of the optical network and components.
- Titan OTC Transport system allows flexible deployments and consistent operations.

Applications

- RF feeder networks
- Inter-Office video transport networks
- HFC optical distribution networks

Generic Specifications

General

Dimensions W x H x D	1.2" x 5.12" x 14.1" (1 wide chassis slot)
Weight	2.5 lbs (approx)
Amplifiers per module	1 independent EDFA per module
Replacement	Plug-in, hot swappable
Optical connectors	SC/APC on front panel
Safety switch	Keyed switch on front panel

Optical Performance

Wavelength	1540nm to 1564nm
Input power	-10dB to +10dB (3dB typical)
Total output power	+13dBm to +22dBm
Noise figure	4.5dB typical @ +3dB input
Output power stability	+/- 0.2 (constant power control)
Pump leakage	<-30dBm
Return loss	>55dB

Electrical Requirements

Power consumption	16 Watts Max
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Environmental

Operating temp range	0 to 50 °C
Storage temp range	-30 to +70 °C
Humidity	5 to 85% (non-condensing)

Management

The Titan TCSEDF is managed via the OTC controller. Front panel controls on the EDFA provide local monitoring & diagnostics.	
Local management	Backlit LCD display with menus and navigation control buttons
Remote management	RJ45/LAN with SNMP
EDFA controls	enable/disable , input and output power monitoring

Ordering Information

(OTC Plug-in module, 1-port optical amplifier)

Titan OTC EDFA modules can be ordered and customized to your specific needs as follows:

TCSEDF-pp

pp = Output power/port dBm (13 to 22 in 1dBm increments) No entry defaults to 13dBm

Mechanical Drawings

