

Titan TXT25 1550nm X-Mod CATV Transmitter

The Titan X-mod transmitter is a high quality, low cost, broadcast transmitter for the RF analog and digital content over long distant optical transport and high split PON access networks. This 1RU rack mount transmitter supports a 77 NTSC channel loading, 44



DOCSIS3/HDTV digital channels, up to 18dB of SBS suppression, and very low noise/distortion figures making it the right choice for Broadcast AND digital content distribution applications. The TXT transmitter supports 2 optical output ports with either 7 or 9dBm optical output power per port, a wide AGC range, 50 to 1000MHz frequency response a narrow 20nm spectral line width and SNMP remote management allow it to be deployed in a wide variety of optical network topologies carrying both analog and digital content from local or remote transmission facilities. A cooled DFB laser, the LiNbO3 external modulator and the unique automatic distortion compensation feature insures that the TXT transmitter will provide excellent noise performance, no laser chirp issues and years of dependable service. When you add up all features and performance capabilities, you are certain to find that the Titan TXT transmitter is the right choice for your network plans.

Features and Benefits

- 1550nm transmitter with narrow spectral width
- A10dB AGC range to minimize installation effort and insure consistent long term performance
- Wide frequency range from 47 to 1000 MHz for current and future network applications
- Supports a 77 channel loading along with digital QAM channels, HDTV and DOCSIS3 support.
- Distortion pre-compensation allows high fidelity links over long distances for high video quality
- Simultaneous SBS/SPM suppression supports point-to-point **and** point-multi-point applications.
- Variable SBS suppression up to 18dB for high power, long distance access networks
- Optional high output power for long distance applications reduces the need for EDFAs
- Status indicators, RF and Optical power monitors, laser and internal alarms
- Front panel display & controls with SNMP remote management for diagnostics & maintenance.
- Keyed laser shut-down switch allows safe maintenance of the optical network and components

Applications

- Traditional HFC deployments
- Long distance video transport (up to 100km)
- PON overlay and RFoG access Networks

Generic Specifications

General

Dimensions W x H x D	19" x 1.75" x 13.8" (1 RU Rack mount)
Weight	Approx 14lbs. (1.13kg)
Optical connectors	2 SC/APC on rear panel
RF Connectors	75Ohm, Female "F" connectors
Modulation	Externally modulated

Optical Performance

Wavelength	1540nm to 1560nm
Output power	+7 or+ 9dBm (Optional)
Optical outputs	2 ports on rear panel
SBS Suppression	None, 13, 16, 18 (selectable)
CNR	>51 dB
CSO	<-60 dBc
CTB	<-65 dBc

RF Performance

RF Bandwidth	47 to 1000 MHz
RF input level	+15dBmV to+ 25dBmV
Channel loading	77 NTSC channels + 44QAM channels
RF return loss	>16dB (into 75 ohm load)
RF Monitor	-20dB (referenced to input power)

Electrical Requirements

AC power	90 - 265VAC, 50/60 Hz (Universal AC)
DC power (optional)	-36 to -60VDC (fuse for 6 Amps)
Power consumption	100 Watts Max

Environmental

Operating temp range	0 to +50C
Storage temp range	-20 to +60C
Humidity	5% to 85% (non condensing)

Management

Local management	Backlit LCD display , Status LED, control buttons, keyed laser shut-off & RF monitor on front panel
Remote management	SNMP LAN port on rear panel
Transmitter controls	Enable/disable AGC, SBS, alarm suppression

Ordering Information

(Stand-alone, 1-RU, externally modulated, 1550nm CATV transmitter)

Titan TXT25 transmitter can be ordered and customized to your specific needs as follows:

TXT25-pp-ps

pp = Output power/port **S** (7dBm) or **H** (9dBm) No entry defaults to +7dBm/port

ps = Power supply type (**AC**, **DC**)

Mechanical Drawings

