

Titan OTC HFC Return Path Receiver

The Titan HFC Return Path Receiver (RPR) is a low cost high performance receiver for HFC networks. It offers wide spectral bandwidth, broadband RF performance, and adjustable RF levels allowing it to be adapted to most HFC networks in service today. It is a member of the Titan OTC (Optical Transport Chassis) product family that includes RFoG return path receivers, EDFAs, 1310nm and 1550nm CATV transmitters along with the 14 slot OTC chassis. The Titan HFC return path receiver module houses 2 independently managed optical receivers in a single slot wide case allowing a single Titan OTC chassis to support 28 HFC return paths in a small 4RU space head-end equipment space. This hot swappable module features front



panel diagnostics as and supports SNMP for remote configuration and monitoring, making it the right choice for deployment wherever high reliability and high availability return path data is a requirement.

Features and Benefits

- Wide spectral width to support 1310nm, 1550nm, & 1610nm return paths.
- High density chassis design with 2 RFoG RPRs per module for up to 28 RPRs in a 4RU shelf.
- Wide RF bandwidth to allow future DOCSIS channel bonding up to 200MHz.
- Remote management using SNMP allows easy integration to standard management systems.
- Low power consumption. 16 Watts per module for low cost ongoing operations.
- Status indicators, RF monitor and Hot-swappable design for easy diagnostics & maintenance.
- A Titan OTC Transport system allows flexible deployments and consistent operations.

Applications

- Standard 2-way HFC network deployments
- DOCSIS 3 high performance networks
- Video on demand, DAVIC, and VoIP applications

Generic Specifications

General

Dimensions W x H x D	1.2" x 5.12" x 14.6" (1 wide chassis slot)
Weight	2.5Lbs. (1.13kg)
Receivers per module	2 independent RPRs per module
Optical connectors	SC/APC on front panel (FC/APC opt)
RF Connectors	75Ohm, Female "F" connectors
Replacement	Plug-in, hot swappable

Optical Performance

Input Wavelength	1100nm to 1620nm
Input sensitivity	-10 to 0dBm
Optical return loss	>40dB

RF Performance

RF Bandwidth	5MHz to 200mHz
RF output level	40dBmV (pad disabled, -5dDm input)
Flatness	+/-1dB (no tilt)
RF return loss	>16dB (into 75 ohm load)
RF Monitor	-20dB referenced to output
RF Pad attenuation	18dB Max, in 1 dB steps

Electrical Requirements

Power consumption	16 Watts Max
-------------------	--------------

Environmental

Power consumption	16 watts Max
Operating temp range	-0 to 50 °C
Storage temp range	-30 to 70 °C
Humidity	5 to 85% (non-condensing)

Management

The Titan TCRHFC receiver is managed via the OTC controller. Front panel controls on the receiver module provide local monitoring and diagnostics.	
Local management	Backlit LCD display with menus and navigation control buttons
Remote management	RJ45/LAN with SNMP

Ordering Information

(OTC Plug-in module, dual HFC return path receiver)

The Titan HFC return path receiver can be ordered as follows. No ordering options are available on this unit.

TCRHFC

Mechanical Drawings

