



Quad Return Receiver Modules:

Applications:

ATX's quad receivers have been deployed for numerous applications to receive return traffic at the headend.

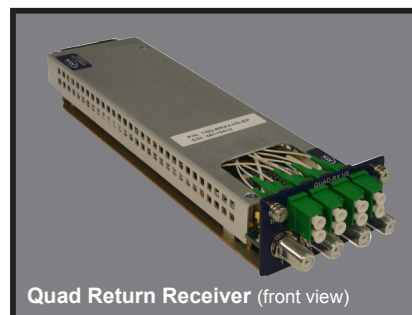
- ▶ Node segmentation
- ▶ Distribution networks
- ▶ RFoG applications
- ▶ FTTx networks
- ▶ Long haul super-trunking

Features:

- ▶ Very low noise
- ▶ Four compact modules in a single TranScend TSD-CH-DC chassis
- ▶ Standard, high sensitivity & integrated DMux configurations
- ▶ Hardened -20°C to +75°C version available
- ▶ Optional express port
- ▶ SNMP remote monitoring

Key Benefits:

- ▶ The TSD-RRX series are high performance receivers for return path applications
- ▶ Each compact TSD-RRX module has four completely independent optical receivers
- ▶ Four modules can be housed in a single TranScend TSD-CH-DC chassis enabling 16 return paths to be hosted in 1RU
- ▶ The TSD-CH-DC can be mounted on top of each other so 48 return paths can be accommodated in a 3RU space
- ▶ High sensitivity (RFoG) units are available with optional built-in express ports that can be used to feed & extract GPON wavelengths
- ▶ Standard sensitivity units with optional integrated Mux



Available Configurations

| Available Configurations |
|---|
| Standard & High Sensitivity Receivers. |
| Standard & High Sensitivity Receivers with Express Ports. |
| Standard & High Sensitivity Receivers with Express Ports & Integrated DMux. |
| NOTE: All receivers available in hardened module versions (-20°C to +75°C). |

Quad Return Receiver Modules:

Quad Return Receiver Specifications

| SPECIFICATIONS | | |
|--|--|---|
| NPR & DYNAMIC RANGE | | |
| HIGH SENSITIVITY RECEIVER ⁽¹⁾ | | 30/15 dB |
| STANDARD RECEIVER ⁽²⁾⁽³⁾ | | 40/15 dB |
| RECEIVER WITH INTEGRATED DMUX ⁽⁴⁾ | | 40/15 dB |
| WAVELENGTH | | |
| HIGH SENSITIVITY & STANDARD RECEIVER | OPERATING WAVELENGTH | 1270-1620nm |
| | OPERATING WAVELENGTH | ITU ± 0.2 |
| RECEIVER WITH INTEGRATED DMUX | DROPPED ITU WAVELENGTH ⁽⁴⁾ | Band A or B |
| | DROPPED WAVELENGTH INSERTION LOSS | 0.8-1.4 dB |
| OPTICAL INPUT | | |
| OPTICAL INPUT LEVEL | HIGH SENSITIVITY RECEIVER | -18 to -30 dBm |
| | STANDARD RECEIVER | 0 to -20 dBm |
| | STANDARD RECEIVER WITH INTEGRATED DMUX | 0 to -20 dBm |
| RF OUTPUT | | |
| NUMBER OF OUTPUTS | | 4 |
| FREQUENCY RANGE ⁽⁵⁾ | HIGH SENSITIVITY RECEIVER | 5-85 MHz |
| | STANDARD RECEIVER | 5-200 MHz |
| | STANDARD RECEIVER WITH INTEGRATED DMUX | 5-200 MHz |
| RF OUTPUT LEVEL ⁽⁶⁾ | | 42 dBmV |
| RF TEST POINT (Relative to Output Level) | | -20 dB |
| EXPRESS PORT | | |
| PASSBAND (If Present) | | 1604-1617nm |
| REFLECT BAND | STANDARD & HIGH SENSITIVITY RECEIVERS | 1300-1620nm |
| | RECEIVER WITH INTEGRATED DMUX | 1430-1620nm |
| | INSERTION LOSS | 0.3-0.8 dB |
| USER INTERFACE | | |
| FRONT PANEL | | LCD Display with Menu Switch Keys |
| REAR PANEL | | One SC/APC Optical Input Connector Four Dual LC Optical Connectors for Optical Outputs & Express Ports |
| NETWORK MANAGEMENT | | SNMP V2 |
| POWER | | |
| POWER CONSUMPTION | HIGH SENSITIVITY RECEIVER | 14W |
| | STANDARD RECEIVER | 10W |
| | RECEIVER WITH INTEGRATED DMUX | 14W |
| AC VOLTAGE SUPPLY RANGE | | 85-240 VAC |
| DC VOLTAGE SUPPLY RANGE | | 42-56 VDC |
| ENVIRONMENTAL | | |
| 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 |
| PHYSICAL | | |
| DIMENSIONS | | 1.6"H x 2.75"W x 10.0"D (4.06H x 7.0W x 25.4D cm) |
| WEIGHT | | 0.5 lbs (0.23 kg) |
| NOTES: | | |
| (1) Specified at -20 dBm optical input level, with a load of 5-42 MHz. | | |
| (2) Specified at -10 dBm optical input level, with a load of 5-42 MHz with standard return transmitter. | | |
| (3) Channel attenuation = 16 dB (factory default setting). | | |
| (4) Band C covers ITU CHs 39, 41, 43, 45 & Band B covers ITU CHs 47, 49, 51, 53. | | |
| (5) Frequency response for +/- 1 dB worst case, +/- 0.75 dB typical. | | |
| (6) Standard receiver at -15 dBm optical input, 10% OMI on transmitter. High sensitivity receiver at -20 dBm optical input, 30% OMI on transmitter. Receivers have integrated Mux. | | |

Specifications subject to change without notice.

