Triax hybrid coax optical transmitter

The Triax OTXS-xx optical transmitter converts electrical CATV signals into intensity modulated optical signals for transmission via optical fibre cables. The transmitter is built into a 19"/1 HU cabinet. Optical output, RF test point, interfaces for RS232 and Ethernet are located on the front panel in addition to a display and 3 buttons for handling. The RF input and the input for main power supply are situated on the rear panel.

The transmitter has the ability to be remote controlled via Ethernet using i.e. Internet Explorer or Firefox. SNMP monitoring read only is implemented. The modulation of the laser diode is gain controlled depending on the number of channels, so the optimum modulation index is always ensured. Additionally the transmitter owns the facility to adapt the modulation manually or via remote control.







OTXS - back OTXS 0X OTXS - front

Technical data

| Туре | | OTXS 06 | OTXS 08 | OTXS 10 | OTXS 12 | OTXS 16 | OTXS 20 | | |
|---|---------------------------------|---------------------------------------|--------------------------------|----------|----------|----------|----------|--|--|
| Art. No. | | 307506 | 307508 | 307510 | 307512 | 307516 | 307520 | | |
| Number of transmitters | | 1 | 1 | 1 | 1 | 1 | 1 | | |
| Input connectors (for RF) | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | |
| Output connectors (for fibre optic cable) | | SC/APC | | | | | | | |
| RF input | | | | | | | | | |
| Frequency range | MHz | 47 - 862 | 47 - 862 | 47 - 862 | 47 - 862 | 47 - 862 | 47 - 862 | | |
| Level (OMI = 5% @ 42 ch. CENELEC) | dΒμV | 85 ±3 | 85 ±3 | 85 ±3 | 85 ±3 | 85 ±3 | 85 ±3 | | |
| Adjustable offset | dB | ±3 | ±3 | ±3 | ±3 | ±3 | ±3 | | |
| Linearity | dB | ±1.5 | ±1.5 | ±1.5 | ±1.5 | ±1.5 | ±1.5 | | |
| Return loss | dB | >18 | >18 | >18 | >18 | >18 | >18 | | |
| CTB (Non linear distortion) (Popt in=4dBm, OMI=4%) | dB | >65 | >65 | >65 | >65 | >65 | >65 | | |
| CSO -"- | dB | >60 | >60 | >60 | >60 | >60 | >60 | | |
| Relative intensity noise | dB/Hz | <-155 | <-155 | <-155 | <-155 | <-155 | <-155 | | |
| Carrier to noise (Popt in=4dBm, OMI=4%, B=5MHz) | dB | >50 | >50 | >50 | >50 | >50 | >50 | | |
| Test point (F-connector, front) | dB | -20 | -20 | -20 | -20 | -20 | -20 | | |
| Optical System | | | | | | | | | |
| Laser type | | | 20 -20 -20 -20 -20 DBF, cooled | | | | | | |
| Optical output power | mW | 6.0 | 8.0 | 10.0 | 12.0 | 16.0 | 20.0 | | |
| Optical output power | dBm | 8.0 | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | | |
| Additional | | | | | | | | | |
| Control unit | 3 buttons, LCD 2-lines/16 char. | | | | | | | | |
| Remote control | | RJ45, TCP/IP, SNMP r/o | | | | | | | |
| Cascade (for extra upstream receivers (ORxR) | Via RJ11 | | | | | | | | |
| Software update | Via RJ11 RS232, 9-pin | | | | | | | | |
| Housing | | 19", 1 HU | | | | | | | |
| Power supply | VAC | VAC 180 – 253 | | | | | | | |
| Dimensions (w x h x d) | mm 480 x 43 x 205 | | | | | | | | |
| OTYSVVR Return Channel Receiver fitted | l (mara in | fo upon roqu | oot) | | | | | | |

OTXSxxR, Return Channel Receiver fitted (more info upon request)

Triax Fibre optic receiver node

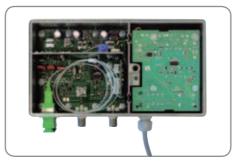
The Triax ORB 901 is a compact fibre optic receiver node product designed to work in tandem with the OTXS-xx fibre optic transmitter product.

The Triax ORB 901 converts the fibre optic transmission signal back to a traditional coax based RF signal. An optional return channel board is available for a later upgrade, or at delivery under the type ORB 911.

The relatively wide sensitivity range of the unit means that it can be placed in many different places as 'islands' of CATV installations without too much focus on distance from the fibre optic transmitter.

The ALC ensures a uniform output level independent upon input signal.







ORB 901 receiver node

ORB 901 receiver node

Technical data

| Туре | | ORB 901 | ORB 911 | |
|--|------|-------------|-------------|--|
| Art. No. | | 307570 | 307572 | |
| Input parameters | | | | |
| Number of receivers | | 1 | 1 | |
| Input connectors (from transmitter) | GHz | SC/APC | SC/APC | |
| Output connectors (for RF) | db | F-female | F-female | |
| Optical input power | dBm | -8 - +3 | -8 - +3 | |
| Reception wavelength | nm | 1290 - 1600 | 1290 - 1600 | |
| Frequency range | MHz | 47 – 862 | 86 – 862 | |
| RF-output level (OMI= 5%@42 ch. CENELEC) | dΒμV | 104 | 104 | |
| Frequency response | dB | ± 1 | ± 1 | |
| Return loss | dBm | >18 | >18 | |
| Carrier to noise (Popt, in = - 2 dBm) | dB | 52 | 52 | |
| Carrier to noise (Popt, in = - 8 dBm) | dB | 45 | 45 | |
| Return Channel | | | | |
| Frequency range | MHz | | 5 - 65 | |
| Frequency response | dB | | ± 2 | |
| Optical output power | dBm | | 0 | |
| Output connector (for fibre optic cable) | MHz | | SC/APC | |
| Wavelength | nm | | 1310 | |
| RF input | dΒμV | | 85 | |
| Intermodulation (2nd and 3rd order, 2ch, OMI=5%) | dB | | 35 | |
| Reception wavelength | nm | | 1200 - 1600 | |
| Additional | | | | |
| Power supply | VAC | 180 - 253 | 180 - 253 | |
| FTTH/FTTP Optical | | Optical | | |

