

# 1550 nm directly modulated optical transmitter

(45 – 1.218 MHz)

10420211  
OTXi-1550-1xX-1,2G



- Cost effective 1550 nm optical transmitter for use in HFC networks with short fiber lengths and modest requirements
- Conversion of RF signals in amplitude-modulated optical signals for the forward path in CATV HFC networks
- Equipped with either ORTEL or AOI DFB lasers for a very good linearity and high optical output power
- Independently developed digital automatic processing technology in the RF drive part, automatic processing of the drive level power according to the actual RF input signal level and the channel loading to ensure the optimal value of system parameters
- Advanced multi-frequency RF pre-distortion technology, combined with GaAs amplifier stages, ensures an effective improvement of the system parameters
- Advanced 32 bit processor, built-in blue screen 160 x 32 dot matrix LCD monitor
- System parameter setting by front panel keypad, serial interface (RS 232) or user-friendly web interface
- SNMP network management functionality via RJ 45 interface
- 2 power supplies, each with 50 % load sharing, in case one power supply fails the second takes over 100 %
- Dimensions: 19"/1RU (483 x 370 x 44 mm (W x D x H))
- Weight: approx. 3,7 kg
- Connector types: SC/APC (optical) and F-females (RF and test point) – E2000/APC alternative available
- Ready for DOCSIS® 3.1

Parameter	Frequency [MHz]	OTXi-1550-1xX-1,2G
Operating wavelength [nm]		1550 ± 20
Optical output power [mW/dBm]		10/10
Optical return loss [dB]		≥ 50
RF frequency range [MHz]		45 – 1.218
RF input level range [dBμV]		72 ... 88
Frequency response [dB]		± 0,75
AGC control range [dB]		± 5
MGC control range [dB]		0 – 10
Return loss [dB]	45 – 550	≥ 16
	550 – 1.218	≥ 14
System parameters		42 channels CENELEC, 4 % OMI, 20 km fiber length, Rx = 0 dBm
Composite Second Order (CSO) [dB]		≥ 60
Composite Triple-Beat (CTB) [dB]		≥ 63
Carry-to-Noise (C/N) [dBc]		≥ 48
Optical connectors		SC/APC
Supply voltage [VAC]		2 x 110 – 250/50 Hz (50 – 50 load sharing)
Power consumption [W]		< 30
Operating temperature range [°C]		0 ... +45
Storage temperature range [°C]		-20 ... +65
Max. relative humidity (operation and storage)		max. 95 %, no condensation
Order No.		10420211

