

Optical nodes

COMPACT OPTICAL NODE **OX3**

OX3 is a compact 1.2 GHz optical node for deep -single- fiber networks. It uses a WDM to separate the down- from the CWDM upstream wavelengths. The downstream has Optical Level Control (OLC) and a high RF output amplifier stage. The power consumption is nevertheless low. The optical receiver/transmitter is integrated on the motherboard. Different split options are possible with the OX3K kit. The OX3R can be remotely powered either via a dedicated F-connector at the side, or via an unused RF Out port. This allows the use of the existing coaxial network for remote powering when migrating to a fiber network. The node can also be used for remote powering of the network connected to the RF Out ports.

OX3 features

- Built-in WDM, 2 wavelengths for single fiber
- Burst and continuous operational mode
- Downstream 1550 nm and 1310 nm models available
- Upstream CWDM fixed on board
- 1 (CMX1) or 2 outputs (CMX4)
- 1218 MHz down- and 204 MHz upstream
- Diplexer/filter kit to define the split
- Push buttons and LED indication for adjustments

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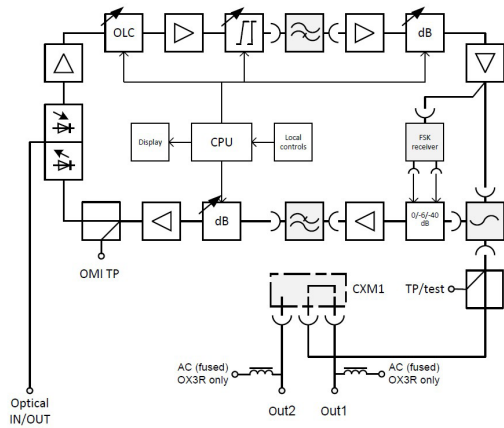
DISTRIBUTION NODE / OX3

TECHNICAL SPECIFICATIONS: OPTICAL ⁽¹⁾			
Optical return loss	40.0 dB	WDM wavelength downstream	1550 nm
WDM insertion loss	0.7 dB	WDM wavelength upstream ⁽²⁾	1270...1610 nm
TECHNICAL SPECIFICATIONS: DOWNSTREAM ⁽¹⁾			
Receiving wavelength ⁽²⁾	1550 (S1), 1310 (S2) or 1310+1550 (S3) nm	Flatness	± 1.0 dB
Optical receiving power	-8...0 dBm	Interstage attenuator	0...18 dB, 1 dB step
OLC range	-5/-6/-7/-8...0 dBm adjustable	Interstage slope	0...15 dB, 1 dB step
Frequency range ⁽³⁾	85/105/258...1218 MHz	Umax (112 QAM channels, 9 dB sloped)	107 dBμV
Return loss	18 dB @ 40 MHz -1.5 dB/oct.	Test point	20 dB
TECHNICAL SPECIFICATIONS: UPSTREAM ⁽¹⁾			
Output wavelength CWDM ⁽²⁾	CWDM	Return loss	16 dB
Optical output power	+3 dBm	Adjustable attenuator	0...18 dB, 1 dB step
Frequency range	5...65/85/204 MHz	RF input level	68...85 dBμV
GENERAL SPECIFICATIONS ⁽¹⁾			
Supply Voltage	OX3L: 180...255 VAC OX3R: 30...90 VAC	Optical connector	SC/APC8
Power Consumption	Typical 16.5 W without FSK receiver	Test point connectors	F-female
Remote current (OX3R)	7A	EMC compatibility	EN 60728-2
Class of enclosure	IP 50	Safety	EN 60728-11
Dimensions (h x w x h)	220 x 210 x 80 mm	ESD	4 kV

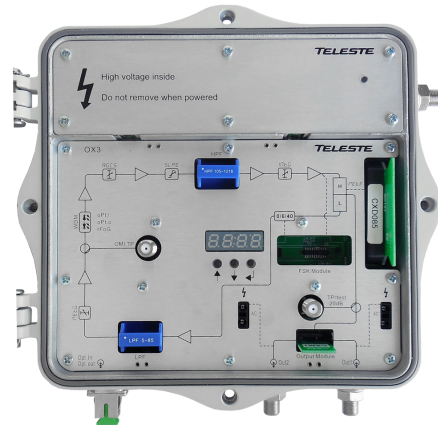
NOTES

- (1) Typical values. Please contact us for detailed conditions.
- (2) Check availability and possibilities before ordering. Minimum order quantities applicable.
- (3) Set by diplexer and filters kit OX3Kxxx. Other frequencies and applications on request.

BLOCK DIAGRAM



IMAGERY (OX3R)



ORDERING INFORMATION

OX3vxxx-yyS1	Single fiber compact node, 1550 nm downstream window OX3L: 230VAC cable at the side OX3R: 65VAC with F-female adapter at the side, no fuses - upstream bandwidth "xxx" (65/85/204 MHz, set by OX3Kxxx diplexer/filter kit) - upstream CWDM transmitter wavelength 1yy0 nm (integrated on motherboard) - 1 output (CXM1 output module) with F-female adapter
OX3vxxx-yyS2	Similar as S1 but with 1310 nm downstream window
OX3vxxx-yyS3	Similar as S1 but with both 1310 and 1550 nm downstream windows

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TELESTE CORPORATION

www.teleste.com

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