

OTC 1000 F Compact return path transmitter for Fiber To The Curb

Description

The compact node **OTC 1000 F** is specially designed for transmitting return path signals from Fiber To The Curb locations, situated at the end of the optical net. The transmitter has one electrical input and one optical output. The laser is a double isolated 1310 nm FP laser. Optional DFB 1310 nm, 1550 or CWDM laser can be fitted. The unit has an integrated pilot generator. Filters for 15-65 MHz and 27 MHz are configurable. The RF input is provided with a test socket.

Housing is made of die-cast aluminium and offers protection according to IP54. This type of housing guarantees optimal heat dissipation and perfect protection of the electronic components.



Features

- Ultra-high efficiency switch mode power supply (> 88%).
- The plug-in modules (PIM..) for attenuation can be changed without service interruption.
- Indicator for DC and AC supply voltages enabling fast diagnosis.
- Power factor corrector which reduces power loss in feeding-net by 75% (I²R).
- Ceramic capacitors in switch mode power supply secondary site, significantly improving lifetime, reliability and EMI.
- Only electrolytic capacitor on input site, stress protected by PFC.

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Hirschmann Multimedia B.V. Pampuslaan 170 1382 JS Weesp	Tel.: 0031(0)294462555	Type Nr.:OTC 1000 F	Status: Preliminary	Page 1 of 4

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General data

Dimensions HxWxD	:	115x190x85 mm
AC connection	:	AMP 6,3 mm
Optical output	:	SC/APC 8°
Test sockets	:	IEC 169-2
RF input	:	F
Earthing connection	:	AMP 6,3 mm
Nominal temperature range	:	-15...+55°C
Maximum temperature range	:	-15...+70°C
Ordering type	:	OTC 1000 F, art. nr. 695.004.460

Technical data *

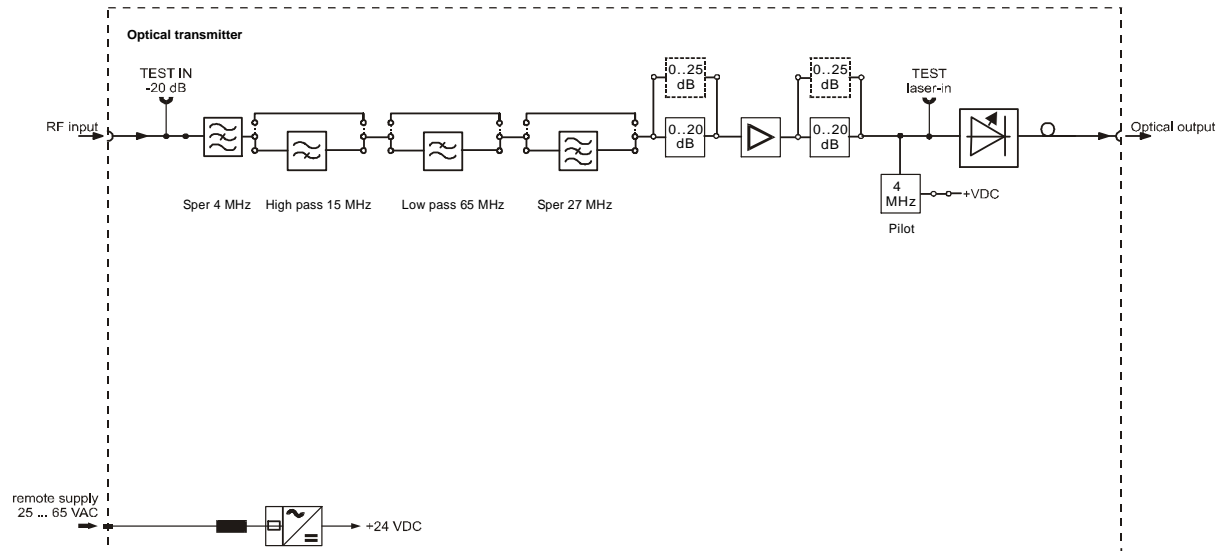
Optical data		
Laser type	:	FP DFB (CWDM)
Wavelength	:	1310 nm 1550 nm
Maximum optical output power	:	+ 3 dBm + 6 dBm
RIN	:	-135 dBc/Hz -150 dBc/Hz
Integrated Pilot (activated via jumper)	:	4 MHz
Configurable filter	:	15 MHz High pass (-3 dB at 10 MHz)
Configurable filter	:	65 MHz Low pass (-3 dB at 70 MHz)
Configurable filter	:	27 MHz (-30 dB)
Electrical data		
Frequency range	:	5...65/200 MHz
Return loss	:	≥ 18 dB bij 40 MHz- 1.5 dB/octave
Impedance	:	75 Ohm
Test socket MP RET-in	:	-20 ± 1 dB typ; ± 1.5 dB worst case; Bidirectional
Test socket laser-in	:	75 Ohm
Nominal input level	:	71 dBμV (for 8% OMI)
Value at testsocket for 8% OMI	:	See attached sticker at testsocket
Attenuation (Attenuator)	:	0...20 dB, plug-in module, step 1 dB
Remote power supply		
supply voltage	:	25...65 VAC sine, 30...75 VAC block
frequency	:	48...62 Hz
Power consumption, remote supply (at 50 VAC)	:	3.5 Watt (4.5 Watt max. using DFB laser)

*Technical data at nominal temperature range

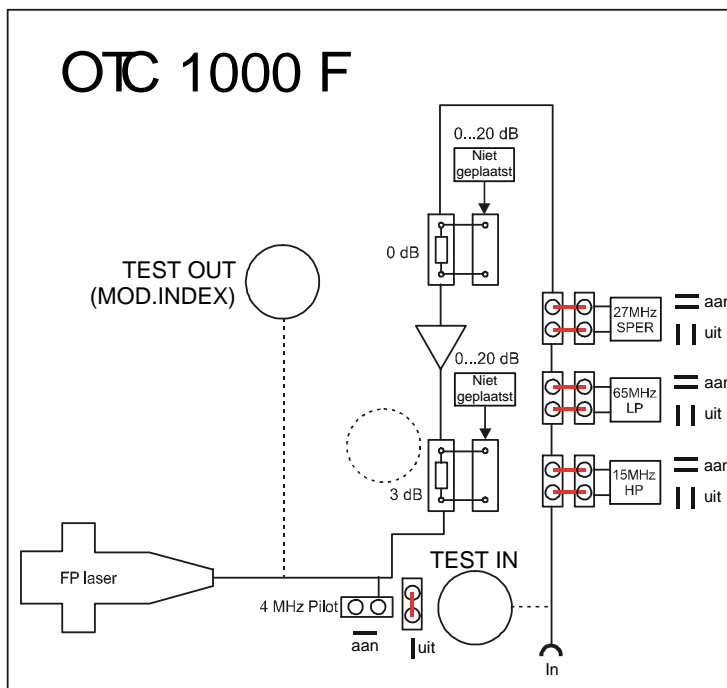
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Block diagram of the optical transmitter OTC 1000 F



Configuration at delivery :



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Plug-in modules

PIM 00, passive pl-in mod., 0 dB	695.004.400
PIM 01, passive pl-in mod., 1 dB	695.004.401
PIM 02, passive pl-in mod., 2 dB	695.004.402
PIM 03, passive pl-in mod., 3 dB	695.004.403
PIM 04, passive pl-in mod., 4 dB	695.004.404
PIM 05, passive pl-in mod., 5 dB	695.004.405
PIM 06, passive pl-in mod., 6 dB	695.004.406
PIM 07, passive pl-in mod., 7 dB	695.004.407
PIM 08, passive pl-in mod., 8 dB	695.004.408
PIM 09, passive pl-in mod., 9 dB	695.004.409
PIM 10, passive pl-in mod., 10 dB	695.004.410
PIM 11, passive pl-in mod., 11 dB	695.004.411
PIM 12, passive pl-in mod., 12 dB	695.004.412
PIM 13, passive pl-in mod., 13 dB	695.004.413
PIM 14, passive pl-in mod., 14 dB	695.004.414
PIM 15, passive pl-in mod., 15 dB	695.004.415
PIM 16, passive pl-in mod., 16 dB	695.004.416
PIM 17, passive pl-in mod., 17 dB	695.004.417
PIM 18, passive pl-in mod., 18 dB	695.004.418
PIM 19, passive pl-in mod., 19 dB	695.004.419
PIM 20, passive pl-in mod., 20 dB	695.004.420
PIM 21, passive pl-in mod., 21 dB	695.004.421
PIM 22, passive pl-in mod., 22 dB	695.004.422
PIM 23, passive pl-in mod., 23 dB	695.004.423
PIM 24, passive pl-in mod., 24 dB	695.004.424
PIM 25, passive pl-in mod., 25 dB	695.004.425

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