RF OVER FIBER

3000 MHz RF Signal Transport Standalone Modules



Features

- 30 MHz to 3 GHz RF Bandwidth
- -40°C to +75°C Operating Temperature Range (1310 nm)
- Rugged Dust-Tight Housing
- 1310 nm, 1550 nm, CWDM Wavelengths
- High SFDR
- Automatic Optical Power Control
- Local LED and Monitor/Alarm Indications
- Uncooled DFB Lasers
- Wide DC Power Input Range, +9V to +30V
- Lasers Conform to Class 1 Emission Level Per CDRH and IEC-825 (EN 60825) Standards

Options

- Integrated +20 dB Transmitter LNA
- Extended Low Frequency, down to 10 kHz
- Integrated WDM
- Manual Gain Adjust, 30 dB Range
- +5 VDC or +12 VDC Bias-T
- Multimode Fiber Capability
- Low Phase Noise Reference Clock Distribution

Applications

- L-band Satcom
- Cellular Backhaul
- MMDS
- Antenna Remoting
- GPS Distribution
- Antenna Site Diversity
- In-Building DAS
- Optical Delay Lines

OZ600

Description

The OZ600 is a broadband RF over Fiber standalone flange mount module which may be configured as a transmitter, a dual transmitter, a receiver, a dual receiver, or a transceiver (transmitter + receiver). Fiber links may be configured for unidirectional or bidirectional RF traffic. The OZ600 has a wide dynamic range and supports RF transport in situations where transport distance or flexibility of cabling may prohibit the use of coaxial cable. Packaged in a rugged dust-tight cast metal housing, the OZ600 provides high Spurious Free Dynamic Range (SFDR) transport for RF signals in the frequency range 30 MHz to 3 GHz. Optional extended bandwidth of 10 kHz (for lower rolloff) is also available. Manual Gain Control is available to adjust end-to-end RF link gain and to optimize the receiver output RF level. The OZ600 features a linear optically isolated DFB laser diode operating at 1310 nm or 1550 nm and/or a high performance InGaAs photodiode. CWDM wavelengths are also available. Standard transport is over 9/125 µm Single Mode Fiber, however Multimode fiber transport is also an option (contact Optical Zonu for details). The standard RF interface is 50 Ohm SMA and the standard optical interface is SC/APC (FC/APC is also available). Average Automatic Power Control (AAPC) provides closed loop control of the transmitter optical output power over the full operating temperature range. Alarm and monitoring functions are available through a DB9 connector. LEDs provide status of laser bias current (transmitter) and received optical power (receiver). The OZ600 module is powered from +12 VDC.

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