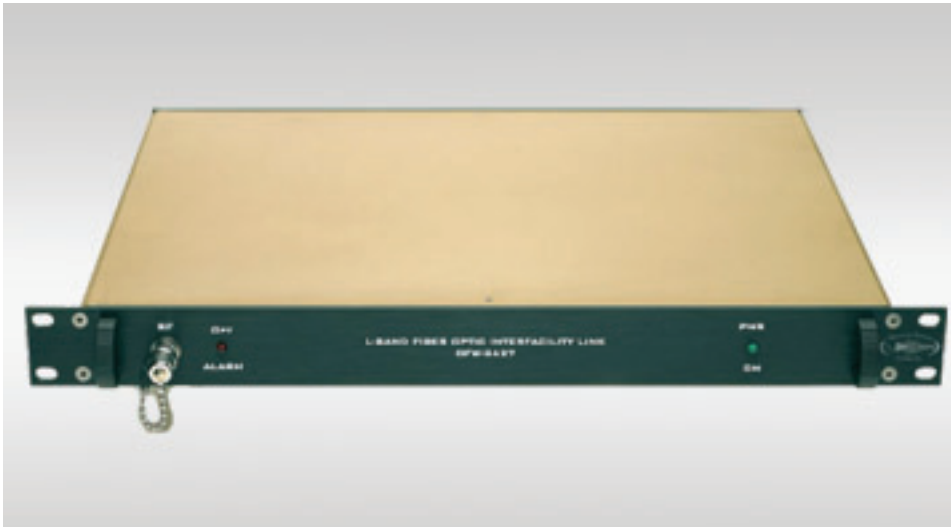


OFW-3427

L-Band Fiber Optic Interfacility Link (IFL) System



The principle hardware for long-haul transmission of RF signals in the frequency range of 800 MHz to 2250 MHz over singlemode fiber optic cable

The OFW-3427 L-Band Fiber Optic IFL System is the principle hardware for long-haul transmission of RF signals in the frequency range of 800 MHz to 2250 MHz over singlemode fiber optic cable. The standard transmitter and receiver configuration provides transmission distances up to 50 km. An optional extended-range configuration can be specified that increases the link range to 80 km. The system's optical conversion process is functionally independent of the RF carrier's data modulation format. The links have low noise and high dynamic range characteristics, a wide operating temperature range and provide turnkey installation.

The system provides status monitoring through the use of an onboard processor that communicates with a host computer over a RS-232 I/O interface. The I/O parameters include laser bias current, optical receive power, internal temperature and alarm monitoring. In addition, an optional integrated Bias-T for LNB powering may be specified. The OFW-3427 provides a high-performance, cost-effective solution for transporting L-Band signals over single mode fiber.

Information: Call us toll-free at 888-868-8967 or email info@b2bphotonics.com

Applications

- Wideband RF Transmission
- Antenna Remoting
- Trunking Radio
- L - Band SATCOM
- GPS / Wireless / PCS

Features

- CWDM Compatible
- Wide Bandwidth, 800 MHz to 2250 MHz
- High Dynamic Range
- Low Noise RF Front-end
- LNB Powering (opt)
- 80 km Extended Range (opt)
- RS-232 or RS-485 Data Port (opt)
- 1 Year Full, 2 Year Limited Warranty

OFW-3427

L-Band Fiber Optic Interfacility Link (IFL) System

Specifications

Optical/Electrical

I/O Impedance	
F-Conn Version:	75 ohm
SMA-Conn Version:	50 ohm
Carrier-to-Noise Ratio*:	40.0 dB @ RF Input Level = dBmV 50.0 dB @ RF Input Level = 20 dBmV
Carrier-to-Noise Ratio**:	25.0 dB @ RF Input Level = 10 dBmV 38.0 dB @ RF Input Level = 20 dBmV
Link RF Gain (@ 0dB Opt. Loss):	21.0 dB (min)
Link RF Gain (@ 12dB Opt. Loss):	1.0 dB (min)
RF Gain Variation Over Temp.:	± 2.0 dB
Composite 1 dB Compression Point:	+34.0 dBmV
Second Order Intercept Point (IP2):	+50.0 dBmV @ 0.0 dB Optical Loss
Second Order Intercept Point (IP2):	+57.0 dBmV @ -12 dB Optical Loss
Third Order Intercept Point (IP3):	+48.0 dBmV
Noise Figure (@ 0 dB Opt. Loss)	15.0 dB @ 0 dB Opt. Loss, 27 MHz BW
Noise Figure (@ 12 dB Opt. Loss):	32.0 dB @ 12 dB Opt. Loss, 27 MHz BW

General

Power Supply, AC Autoranging:	85 VAC -264 VAC, 47 Hz to 440 Hz, Single Phase
Power Supply, DC Autoranging (opt):	-48 VCD to +48 VCD
AC Receptacle:	IEC 320
Optical Input:	FC/APC, SC/APC, AVIM APC or User Specified
RF Output Connector:	SMA(f), 50 ohm or F(f), 75 ohm
Operating Temperature:	-40° C to +71° C
Storage Temperature:	-40° C to +85° C
Local Alarm:	LED - Optical Power Failure LED - Line Power On
Optical Power Monitor:	1 V/m W ± 10%
Remote Alarms:	Open Collector and RS-232 or RS-485 Interface
Dimensions:	19"(w) x 14"(l) x 1.75"(h)

