

12 Gb/s Lightwave Digital Receiver Module

The LDR-12-M is a 12 Gb/s bandwidth high gain, lightwave digital receiver module designed for OC-192, DWDM, and Bit Error Rate Testing (BERT) of a digital optical link.

LDR-12-M 12 GB/s Lightwave Digital Receiver Module



PRODUCT SPECIFICATIONS

Optical Specifications

Operating Wavelength	1250 nm to 1650 nm
Optical Input Level	+3 dBm max.
Responsivity	0.85 A/W @ 1550 nm typ.
O/E Conversion Gain	50,000 V/W
Optical Return Loss	-30.00 dB typ.
Optical PDL @ 1550 nm	0.05 dB typ., 0.1dB max.

Electrical Specifications

Useful Bandwidth	0.01 to 12 Gb/s
S21 3 dB Bandwidth	9 GHz typ.
S22 Characteristics	< -10 dB to 10 Gb/s typ.
Output Coupling	AC Coupled
RF Impedance	50 Ω
Ripple over Bandwidth	± 1.0 dB
Sensitivity	-18 dBm

Product Description

The LDR-12-M is a 12 Gb/s bandwidth high gain, lightwave digital receiver module designed for OC-192, DWDM, and Bit Error Rate Testing (BERT) of a digital optical link. The LDR-12-M is an O/E converter with post/limiting amplifier module designed for use in receivers of STM-64/OC-192 and STM-64/OC-192 with Forward Error Correction (FEC) (10.664 Gb/s) optical transmission systems. This module consists of a PIN photodiode, pre-amplifier, post-amplifier, and limiting amplifier. At the optical input level of -17 dBm, LDR-12-M provides an output level of 1.0Vp-p. This high output level makes it ideal for BERT testing.

Features

- Wide Bandwidth, 0.01 to 12 Gb/s
- Very high O/E gain of 50,000 V/W
- PIN Photodiode
- Pre-amplifier and post-amplifier
- Limiting Amplifier
- Excellent eye diagram at low input

Applications

- OC-192
- DWDM Systems
- Bit Error Rate Testing (BERT)
- For use with Error Detector

Ordering Information

LDR-12-M



To order this product online, visit our site at oequest.com

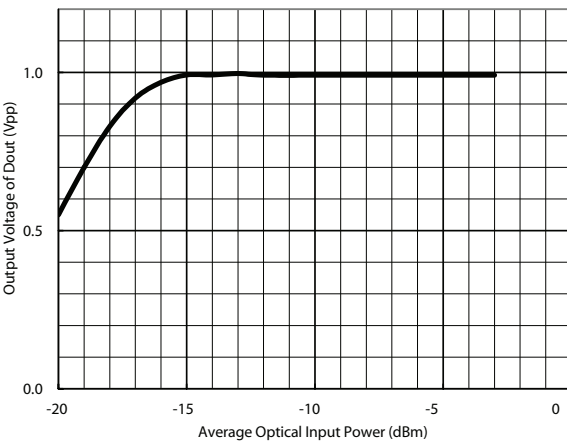
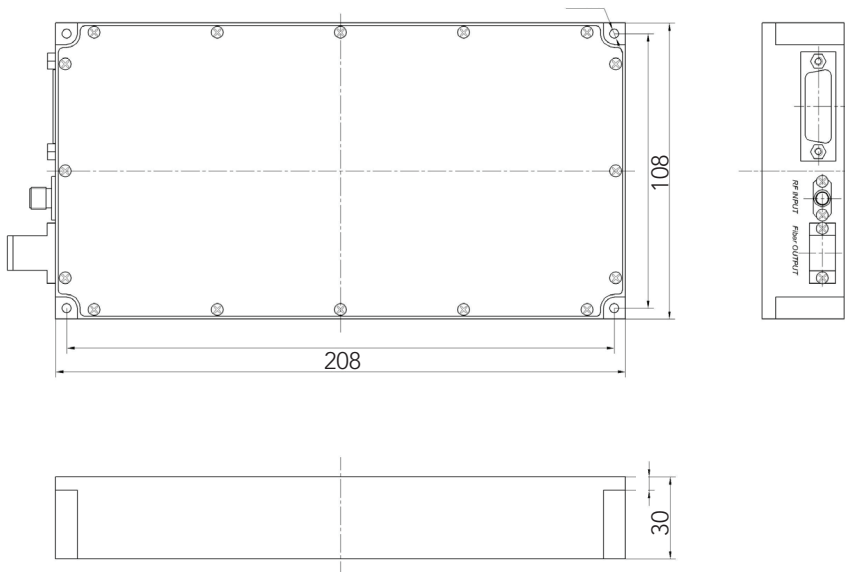


5110 N 44th St, Ste 200L, Phoenix AZ 85018

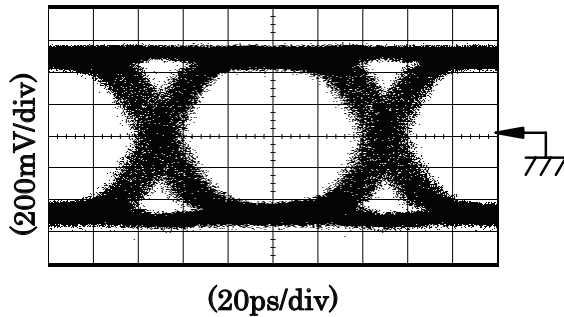
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Product specifications and description are subject to change without notice.
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Mechanical Drawing



O/E Transfer Characteristics at 9.96 Gb/s

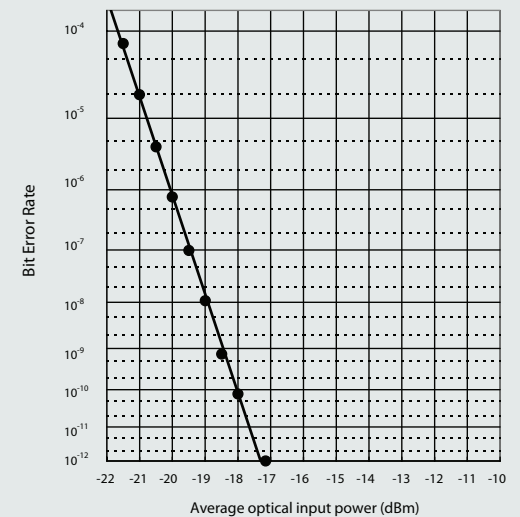


Eye diagram¹

12 Gb/s Lightwave Digital Receiver Module

Mechanical Specifications

Operating Temperature	0° C to +70° C
Storage Temperature	-40° C to +85° C
Power Supply Requirements	+12 V DC, 2 A max.
Optical Connector	FC/APC, SC/APC Optional
RF Output Connector	SMA Female, 50 Ω
DC Connector	DB-15
Local Alarm	LED: Optional Input Power
Dimensions	208 mm x 108 mm x 30 mm
Accessories Included	110 V - 240 V AC Adaptor and RS-232 Cable
Housing	Precision Machined Aluminum, Anodized



Bit Error Rate¹

Ordering Information

LDR-12-M

 OEQuest.com

To order this product online, visit our site at oequest.com

¹ Pin=-9Bm, Bit Rate=9.95 Gb/s, NRZ, PRBS 2²³-1, Mark Ratio=1/2