

Applications

- SONET/SDH Systems
- CATV and 10G-Ethernet
- Transmitter / Receiver components Testing
- Optical Network System Bit Error

Key Features

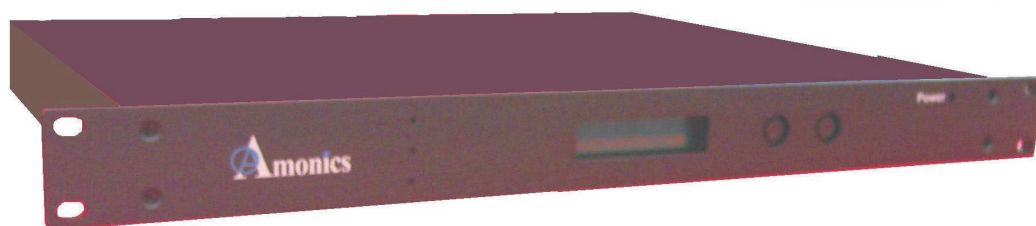
- High data rate
- High sensitivity with Pre-Amp
- High channel isolation with tunable filter
- Full Coverage of C-band range

Description

The Amonics LR-12.5G-R is a tunable wavelength receiver unit, designed for applications requiring 10 Gb/s data rates. It is a self-contained, rack-mount unit ideal for DWDM optical communication systems, components characterization and laboratory measurement. An integrated clock recovery circuit is included to retrieve the clock and data signal. A Pre-Amplifier EDFA for boosting the received signal power and a tunable filter for channel selection and reduction of ASE noise are also included in the unit.

Key Components:

- 10 Gb/s Receiver, and Clock and Data Recovery
- 23dB Gain Pre-Amplifier EDFA
- 100 GHz channel spacing tunable Filter
- Remote Control



Technical Specification

General Specifications

Data Rate (Receiver)	9.95328 or 10.64228 Gb/s
Data Rate (Clock and Data Recovery)	9.95328 Gb/s

Optical Specifications

Operating Wavelength Range	C-Band
Max. Receiver Input Power	-3.0 dBm
Min. Receiver Input Power	-17.0 dBm (average power)

Electro-Optic Specifications

RF Termination	50 ohm
Receiver Data (Dout) Voltage Amplitude	0.7 ! 1.0 Vp-p (1.0 Vp -p typ.)
Receiver Data (Dout) Voltage Coupling	AC coupling
Clock (CLK) Voltage Amplitude	0.7 ! 1.5 Vp-p (0.9 Vp-p typ.)
Q Voltage Amplitude	0.7 ! 1.4 Vp-p (0.9 Vp-p typ.)
Clock (CLK) and Data (Q) Recovery Coupling	Negative DC coupling
Rise/Fall Time	55 ps maximum

Tunable Filter Specifications

Filter Wavelength	1527.998 ! 1563.050 nm
Max. Input Optical Power	300 mW
Insertion Loss	< 2.7 dB
Passband Width @ 1.0 dB	> 30 GHz
Passband Width @ 25 dB	< 150 GHz
Wavelength Repeatability	+/- 1 GHz
Isolation (+/- 10 GHz)	>= 40 dB
PDL (+/- 10 GHz)	< 0.4 dB
Tuning Speed	< 10 s

General Enviromantal Parameters

Parameter	Unit	Rackmount	Benchtop
Operation Temperature Range	°C	0 to 40	0 to +60
Storage Temperature Range	°C	-10 to 70	-10 to +70
Power Supply	V	80 ! 240 VAC, 43-63Hz	80 ! 240 VAC, 43-63Hz
Dimensions	mm	423.5 (L) x 350 (W) x 88 (H) mm	350(W) x 300(L) x 100(H) mm
Electrical Connector	-	SMA	SMA
Control	-	Rocker Switch, Filter Wavelength, EDFA Current	Rocker Switch, Filter Wavelength, EDFA Current
Computer Interface	-	RS232	RS232
Optical Connector	-	FC/APC, FC/UPC, SC/APC, SC/UPC	
Optical Fiber	-	Single mode fiber	

Option:

- Built-in optical attenuator
- Built-in EDFA
- Clock recovery circuit



Ordering Information

Product Code	LR-12.5G-a-bb	a: R for Rackmount, B for Benchtop bb: FA for FC/APC, FC for FC/UPC SA for SC/APC, SC for SC/UPC
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