

## Applications

- SONET/SDH Systems
- CATV and 10G-ENet
- Transmitter/Receiver Components Testing
- Optical Network System Bit Error Rate Testing



## Description

This general purpose optical receiver is designed for high speed testing of optical network systems and components. The standard receiver unit is able to detect modulation frequency up to 11.5GHz. A built-in low noise pre-amp EDFA provides the sufficient amplification for the incoming signal to ensure effective detection at the photoreceiver.

Additional features include a power monitor to control a variable optical attenuator. For complete SONET system applications, an optional 10G clock recovery circuit is available to accompany the standard receiver unit.

## Key Features

- Built-in optical power control module
- Incoming signal and amplified signal
- Power monitor
- Optional built-in low noise EDFA
- Wide bandwidth
- Broadband wavelength range
- Good performance cost ratio
- Highly reliable and durable

### Specifications

	Lightwave Receiver
Data Rate	155Mb/s to 11Gb/s
Input Power Level	-12dBm to -3dBm
Optical Wavelength	1290nm to 1565nm
Optical Sensitivity $2^{23} - 1$ BER $<10^{10}$	Typ. -19dBm, Max. -17.5dBm
Return Loss $S_{22}$	Typ. -12dBm, Max. -5dBm
High Frequency -3dB Corner	Typ. 11.5GHz, Min. 8GHz
Maximum Optical Input Power	0dBm
Optical Power Measure Range	-40dBm to 0dBm
Coupling	AC –coupled to ground
Clock Output (optional)	Min. 500mV
Clock Output Intrinsic Jitter (optional)	0.031 UI RMS

### General Parameters

Parameters	Unit	Specifications
Operation Temperature	°C	0 to 40
Storage Temperature	°C	-10 to 70
Dimensions	mm	260(W) x 330(D) x 150(H)
RF Data Input Connector	-	SMA
Control	-	EDFA driving current
Display	-	EDFA laser output power, average input power
Optical Connector	-	FC/APC, FC/UPC, SC/APC, SC/UPC
Optical Input Fiber	-	SMF-28

### Other options

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



### Ordering Information

Product Code	Lightwave Receiver
--------------	--------------------

Amonics undertakes continuous and intensive product development to ensure its product performance at the highest technical standards. As a result, the specifications in this document are subject to change without notice.

Amonics Limited, 14/F, Lee King Industrial Building, 12 Ng Fong Street, San Po Kong, Kowloon, Hong Kong  
Beijing Amonics Co. Ltd. Room 902, Unit 1, No.99 Chaoyang North Road, Beijing China 100025

Email: [contact@amonics.com](mailto:contact@amonics.com) Website: [www.amonics.com](http://www.amonics.com)

HK Tel: +852 2428 9723

HK Fax: +852 2428 9704

Beijing Tel: +86 10 84783386

Beijing Fax: +86 10 84783396