

GT10 - RX

The GT10-RX convenient features and compact size make it simple to design into cutting edge optical networks, resulting in time and cost savings for the user.

Key Features

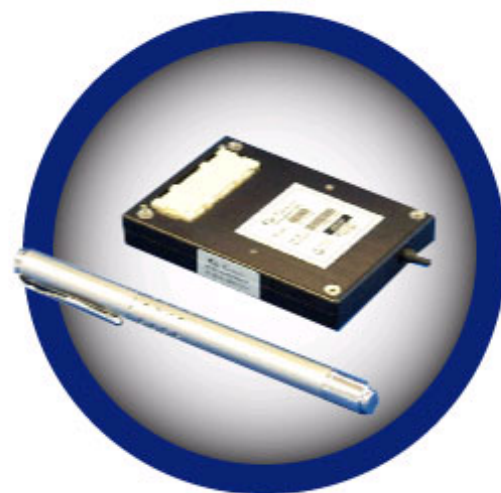
- Small form factor
- Fully compliant with GR-253-CORE
- IEEE 802.3ae 10Gb Ethernet ready
- OIF99.102.8 compliant SERDES timing
- 622 Mbit/s, LVDS electrical interface
- On-board clock/data recovery and 1:16 data demuxing

Applications

Designed for very short reach (VSR) to intermediate reach (IR) deployments including

- Point-to-point high speed optical data communication
- Metro and access optical network equipment

**For more information, call
1-805-499-2033 x207**



The GT10-RX is an integrated high speed data transmitter module optimized for OC-192/ STM-64 applications.

The GT10-RX is manufactured in a compact 2.5"x 3.5"x 0.53" assembly with an integrated heatsink. All sensitive active components are hermetically sealed.

Feature Options

Option	Description	Standard Configuration
100,1,2,3	FC/PC,SPC,UPC,APC optical connector	SC/PC optical connector
105	SC/APC optical connector	
106	LC optical connector	
402/403	SONET IR-2 (-1 to +2dBm P _o) /SONET LR-2a/c (-2 to +2dBm P _o)	SONET short reach (-5dBm to -1dBm output power)
506	Forward clocking (with transmit data clock phase nulling)	Counter clocking (no phase nulling)
001,002	SERDES option A, B	Not specific

Specifications - GT10-RX

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Operating Temperature (case)	T _c	0	+65	°C
Storage Temperature	T _{stg}	-40	+85	°C
Optical Input Power	P _{in}		+3	dBm
Electrical Input Voltage	V _{in}	0	+3	V
Supply Voltages	V _{cc}	0	6	V
	V _{dd}	-0.5	3.6	V
	V _{ee}	0.5	-7	V

Alarm Signals

- ❖ Loss of electrical signal (LOS)

Receiver

Parameter	Symbol	Min	Typ	Max	Unit
Electrical					
Data Output Amplitude (622 Mb/s) ¹	D _o	500	740	1100	mV _{p-p}
Clock Output Amplitude (622 MHz) ¹	DMXOCLK	500	740	1100	mV _{p-p}
Optical					
Wavelength Range	DI	1280		1580	nm
Sensitivity			-17	-15	dBm
Overload		0	+1		dBm
Optical Return Loss		27			dB
Jitter Tolerance			Per SONET GR-253		
Jitter Transfer			Per SONET GR-253		

Status & Monitoring Signals

- ❖ DEMUX PLL Lock detect
- ❖ Received optical power

General

Parameter	Symbol	Min	Typ ²	Max ²	Typ ³	Max ³	Unit
Supply Voltage	Vcc	+4.5	+5.0	+5.25	+5.0	+5.25	V
	Vdd	+3.1	+3.3	+3.5	+3.3	+3.5	
	Vee	-4.7	-5.2	-5.5	-5.2	-5.5	
Supply Current	Icc, +5V		150	180	150	190	mA
	Idd, +3.3		280	320	150	160	
	Iee, -5.2		300	340	700	810	
Electrical Connector	300 pos. MegArray						
Optical Connector	FC, SC, LC						

1. LVDS compatible
2. SERDES option A
3. SERDES option B

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