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An OSI Systems Company

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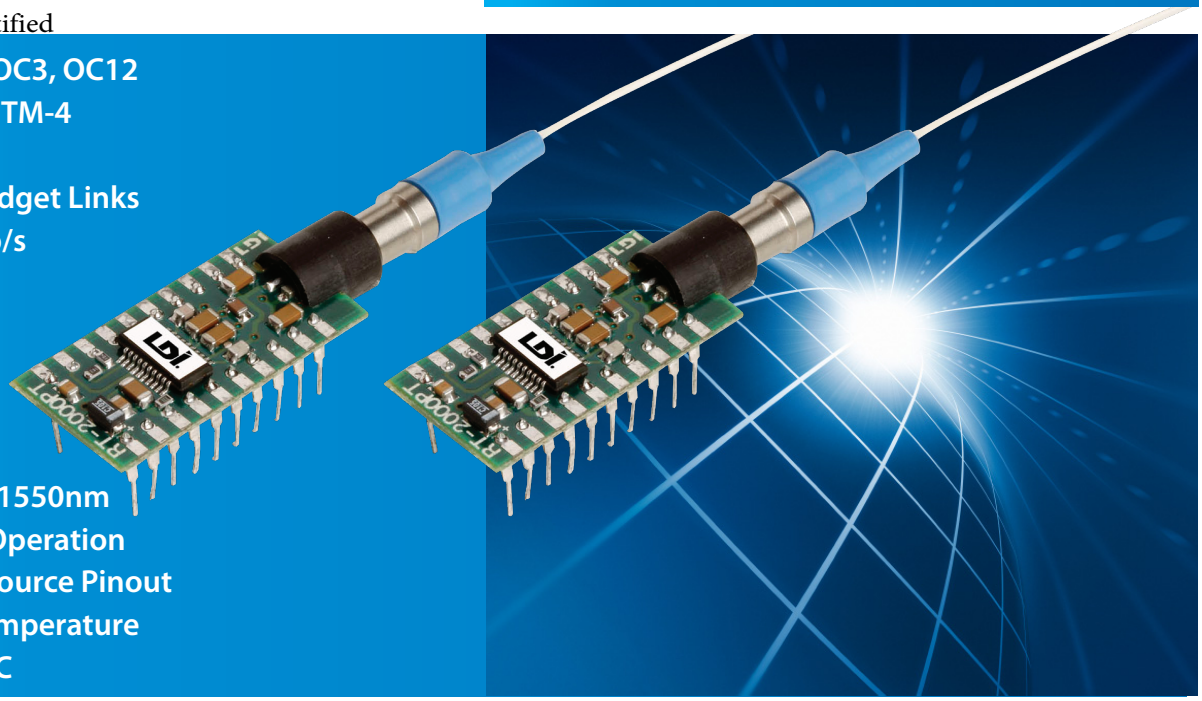
ISO-9001:2015 Certified

Airpak Receiver Modules

- SONET OC1, OC3, OC12
- SDH STM-1, STM-4
- ATM / FDDI
- High-Loss Budget Links
- Up to 622 Mb/s



- 1310nm and 1550nm
- PECL or ECL Operation
- 20-Pin Multisource Pinout
- Operating Temperature
  -40°C to +85°C

The **Airpak** series receivers are full function, high performance digtal fiber optic modules. They provide a cost effective interface between standard **ECL** and **PECL** logic families and optical fiber transmission systems. The innovative application of high-quality surface mount technology and a unique integration of optical and electrical components provide performance and quality without the traditional high cost packaging usually associated with optical modules. The superior reliability engineering on which the modules are based ensures performace in all normal environments and operating conditions.

Specifications and Limits Performance @ 25°C

OPTICAL CHARACTERISTICS	Unit	Min.	Typ.	Max.
Measured Average Sensitivity[1]	dBm			
52 Mb/s			-40	-38
155 Mb/s			-38	-36
622 Mb/s			-32	-30
Maximum Input Power	dBm	-3		
Link Status Threshold	dBm			
(Flag-logic low, decreasing light input)				
52 Mb/s		-54		-38
155 Mb/s		-45		-36
622 Mb/s		-45		-28
Link Status Threshold	dBm			
(Flag-logic high, increasing light input)				
52 Mb/s		-55		-39
155 Mb/s		-44		-35
622 Mb/s		-44		-27

ELECTRICAL CHARACTERISTICS	Unit	Min.	Typ.	Max.
Supply Voltage (Vcc)	V	4.8	5	5.3
Supply Current	mA		70	125
Output Data Voltage[2]	V			
Low		-1.8	-1.75	-1.5
High		-1.1	-1.0	-0.88
Output Flag Voltage	V			
Low (52 Mb/s and 155 Mb/s)[2]	V	-1.8	-1.75	-1.5
High(52 Mb/s and 155 Mb/s)[2]		-1.1	-1.0	
Low (622 Mb/s)[3]			0.2	0.5
High(622 Mb/s)[3]		3.0	4.0	

NOTES:

[1]All values are 1310 nm, measured with an optical input using a 2^{23-1} pseudo random pattern with 50% duty cycle for a BER of 10^{-10}

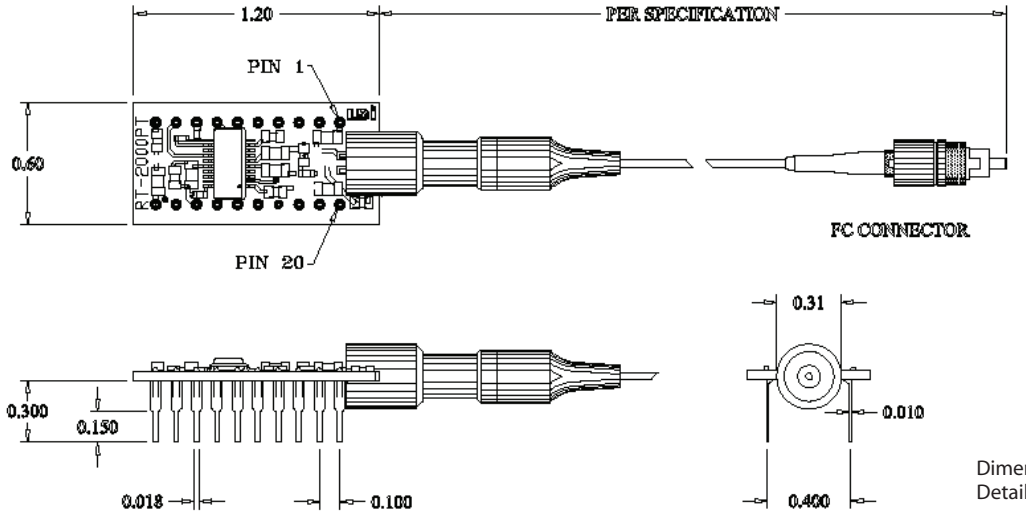
[2]Measured from V_{cc} with a 50-ohm load to V_{cc}-2 volts

[3]Measured from ground

Absolute Maximum Ratings

	Units	Min.	Typ.	Max.
Supply Voltage	V	-	-	5.5
Operating Case Temperature	°C	-40	-	85
Storage Temperature	°C	-40	-	85
Lead Soldering Temp/Time	°C / sec	-	-	250/10

Outline Drawing



PIN ASSIGNMENTS	
Pin No.	**Function**
1, 2, 3, 4, 6	Ground
8, 13 ,15, 16	Ground
5, 17 ,18, 19, 20	No Connection
7	Data
9	Data Not
10	-5V
11	+5V
12	Flag +
14	Flag -

Dimensions: Inches
Detailed package drawings available upon request

Part Ordering Information

Part Number	Data Rate (NRZ Mb/s)	Typical Sensitivity (dBm)
RT2000PT-052FCL	52	-40
RT2000PT-155FCL	155	-38
RT2000PT-622FCL	622	-32

Standard Interface Type 1 meter +/- 0.1 meter length, 50/125/900 um pigtail, FC/PC connector
NOTE: FC/PC connectors on the fiber pigtail are standard. *Other connector types optional*

Personal Hazard and Handling Precautions:
Handle optical fiber with normal care, avoiding stretch, tension, twist, kink or bend abuse. ESD precautions apply.

Warranty:
Please refer to your product purchase agreement for complete details or check with your OSI Laser Diode sales representative.

Notice:
OSI Laser Diode, Inc. reserves the right to make changes to the products or information contained herein without notice. No liability is assumed as a result of their use or application.

Products can be ordered directly from OSI Laser Diode, Inc. or its representatives.
For a complete listing of representatives, visit our website at
www.laserdiode.com