Fiber Optic Link Transceiver



(200m, >1MBD, 630nm, 50 micron core fiber)



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This series of Fiber Optic Link Transceivers is for short distance communication. Our laser feature precision feedback power control to provide high stability against environmental variations and the photodetector has build-in TIA to reduce signal noise. Many wavelengths are available for your application. Analog transmission option is also available.

Features

- High Stability
- Low Cost
- Ease to Use

Applications

- Laboratory Uses
- Testing
- Instrumentation

Specifications

Parameter	Min	Typical	Max	Unit
Center Wavelength	630	850, 1310, 1550	1600	nm
Rise/Fall Time	10	40	80	ns
Output Optical Power	1	2	10	mW
Polarization Dependence			0.1	dB
Output Power Stability	0.1	0.2	0.3	dB
Transmission Data Rate	1	5	20	MBD
Input Voltage (DC)	4.8	5	7	٧
Input Current	80		1000	mA
Transmission Trigger Voltage		>1.5V at 60mA		
Power Consumption			5	W
Reverse Input Breakdown Voltage			7	٧
Operating Temperature	-5		70	°C
Storage Temperature	-45		85	°C

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Mechanical Dimensions (mm)

~ 100mm x 70mm x 20mm



^{*}Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Electrical Connection

BNC Female for Input **BNC Female for Output** Wall mount DC Power supply provided with a 110 to 220 AC input





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Ordering Information

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Prefix	Config	Wavelength	Polarization	Modulation			Fiber Type	Fiber Cover	Connector
TRAC-	Standard = 1 Special = 0	630nm = 1 850nm = 2 1300nm = 3 1480nm = 4 1550nm = 6 1610nm = 7	Random = 1 Maintaining = 2	Digital = 1 Analog = 2			SM28 = 1 50/125 = 5 60/125 = 6 PM1550 = 2	0.9mm = 3 1mm = 4 3mm = 5	FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 Special = 0

Application Notes

Fiber Core Alignment

Note that the minimum attenuation for these devices depends on excellent core-to-core alignment when the connectors are mated. This is crucial for shorter wavelengths with smaller fiber core diameters that can increase the loss of many decibels above the specification if they are not perfectly aligned. Different vendors' connectors may not mate well with each other, especially for angled APC.

Fiber Cleanliness

Fibers with smaller core diameters (<5 µm) must be kept extremely clean, contamination at fiber-fiber interfaces, combined with the high optical power density, can lead to significant optical damage. This type of damage usually requires re-polishing or replacement of the connector.

Maximum Optical Input Power

Due to their small fiber core diameters for short wavelength and high photon energies, the damage thresholds for device is substantially reduced than the common 1550nm fiber. To avoid damage to the exposed fiber end faces and internal components, the optical input power should never exceed 20 mW for wavelengths shorter 650nm. We produce a special version to increase the how handling by expanding the core side at the fiber ends.