

SFP Fiber Optic Transceivers

TFCxxxx-TL29 125 Mbps CWDM Optical Transceiver Module

FEATURES

- 125 Mbps data throughput
- 10 CWDM ITU grid wavelengths
- Pluggable SFP MSA footprint
- Duplex LC connector
- Very low jitter
- Metal enclosure for lower EMI
- 3.3 V power supply with low power dissipation
- Extended operating temperature range



PRODUCT OVERVIEW

TFCxxxx-TL29 series CWDM Optical Transceiver Modules are ideally suited for Fast Ethernet applications. Conforming to the Small Form Factor Pluggable (SFP) Multisource Agreement, these state-of-the-art plug-in components are designed for applications that require rates of up to 125 Mbps, with the laser transmission portion of the device operating at one of 10 available ITU-compliant (G.694.2) CWDM wavelengths. The modules are supplied with a duplex LC connector.

TFCxxx-TL29 series modules feature a very low jitter contribution, resulting in extremely clean, high-quality eye patterns. And the modules' metal enclosure not only makes them sturdier, but also improves their FCC test margins. This emission and ESD control is particularly important in applications with sensitive multiport hubs and switches. The module operates at extended voltage and temperature ranges, and dissipates less than 1 W. The Class 1 laser transmitter complies with applicable safety standards (IEC 60825-1 and 21 CFR 1040.10 and 1040.11).

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	2.2" L x 0.4" H x 0.5" W (5.6 cm x 1.0 cm x 1.3 cm)
Weight	0.1 lbs (0.05 kg)
Environmental	
Application temperature range	-10° to +85°C (14° to +185°F)
Storage temperature range	-40° to +85°C (-40° to +185°F)
Humidity	5% to 95% non-condensing
Optical Interface	
Optical connectors	Duplex LC
Power requirements	
Input voltage	3.3 V _{DC} (160 mA)
Power consumption	1 W max
General	
Link budget	29 dB
Data rate	125 Mbps
Hot plug-in/out	
Optical	
Transmitter:	
Transmitter type	Uncooled CWDM DFB
CWDM optical wavelengths	10 (1430, 1450, . . . , 1610 nm)
Optical output power	-2 dBm min
Optical extinction ratio (ER)	10.0 dB min
Receiver:	
Optical wavelength	1420 nm min, 1620 nm max
Receiver sensitivity	-34 dBm min
Maximum input power	-3 dBm
Receive LOS assert level	-36 dBm
Regulatory	
Class 1 devices per FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1 laser safety regulations.	

RELATED PRODUCTS

Fast Ethernet applications

ORDERING INFORMATION

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- 125 Mbps CWDM Optical Transceiver Module
- CWDM Wavelength (1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 or 1610 nm)
- Extended Op Temp Range, with Duplex LC Connector and 29 dB Link Budget

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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