

HG MTRS-6E31-01 Datasheet



HGTECH 6G 1310nm SMF 10km SFP+ Fiber Optic Transceiver Module

MTRS-6E31-01

MTRS-6E31-01 is a high performance, cost effective module, which is supporting Multi Rate 3.072-6.144Gbps, and transmission distance up to 15km on SM fiber. The transceiver consists of two sections: The transmitter section incorporates a 1310nm DFB Laser and a driver. The receiver section consists of a PIN photodiode integrated with a transimpedance preamplifier (TIA) and a Limiting Amplifier. The module is hot pluggable into the 20-pin connector. The high-speed electrical interface is base on low voltage logic, with nominal 100 Ohms differential impedance and AC coupled in the module.

The optical output can be disabled by LVTTTL logic high-level input of TX_DIS. Transmit Fault (Tx_Fault) is provided to indicate that the module transmitter has detected a fault condition related to laser operation or safety. Loss of signal (RX_LOS) output is provided to indicate the loss of an input optical signal of receiver. A serial EEPROM in the transceiver allows the user to access transceiver monitoring and configuration data via the 2-wire SFP Management Interface. This interface uses a single address, A0h, with a memory map divided into a lower and upper area. Basic digital diagnostic (DD) data is held in the lower area while specific data is held in a series of tables in the high memory area.

Features

- Up to 15KM transmission distance

- Support Multi Rate 3.072-6.144Gbps
- 1310nm DFB and PIN receiver
- SFI electrical interface
- 2-wire interface for integrated Digital Diagnostic Monitoring
- SFP+ MSA package with duplex LC connector
- Hot pluggable
- Very low EMI and excellent ESD protection
- +3.3V power supply
- Power consumption less than 1.0W
- Operating case temperature: -40~+85°C

Applications

- High-speed storage area networks
- Computer cluster cross-connect
- Custom high-speed data pipes
- LTE optical repeater application

Compliance

- Compliant with IEEE 802.3ae-2002
- Compliant with MSA SFF-8472
- Compliant with MSA SFF-8431

Specifications

- P/N: MTRS-6E31-01
- Product Description: 6G SFP+ 10km
- Data Rate (Gbit/s): 6G
- Reach: 10km

- TX: 1310nm DFB
- RX: PIN
- TX_Min (dBm): /
- TX_Max (dBm): /
- Rx Sensitivity (dBm): <-14.4
- Power Consumption: <1w
- Operating Temperature (deg C): -40~85°C

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