Vi01310G10SM

1310nm Single-Mode 10G Hardened Fiber SFP Transceiver

Features

- Optical Interface compliant to IEEE 802.3ae and 10Gbase-LR
- Electrical Interface compliant to SFF-8431
- Distances of 10km SMF connection
- Duplex LC connector
- Industry standard small form pluaggable (SFP) package
- 1310nm DFB transmitter, PIN photo-detector
- Low power consumption
- Hot pluggable
- Advanced firmware allow customer system incryption information to be stored in transceiver
- Cost effective SFP+ solution enables higher port destinies and greater bandwidth
- All metal housing for superior EMI performance

Applications

- Switch-to-Switch interconnect
- High speed wide bandwidth up and downlink

Vi01310SM-H is a 1310 nano meter 10G SFP transmitting on single mode fibers. It is compatible with the MultiSource Agreement (MSA). The Vi01310SM-H is designed to work with 10G network switche uplinks for system requiring high bandwidth transmission.

Technical Specifications*

Electrical

Supply Voltage	3.1V to 3.5V
Current	250mA
Signal Detect	TTL
Compatible with	IEEE 802.3z, SONET OC-24-LR-1
Fiber type	SingleMode
Transmission speed	1.25Gbps
Wavelength	1310nm
Distance	20Km

Regulatory

Safety	CE
Environmental	RoHS, WEEE

Environmental

Temperature	Operating: -40°C to +75°C Storage: -40°C to +85°C

Mechanical

Dimensions	0.41 x 2.2 x 0.53 in (10.5 x 57 x 13.7 mm)
Weight	0.035 lbs (15g)
Material	Metal Alloy

* Specifications subject to change without notice.
**There is no standard method for reading SFP bandwidth. Different SFPs may not sense the differences between 100Mbps and 1000Mbps. We suggest using the SFP designed for the primary ports bandwidth.

Ordering Information

Part No.	Description
Vi01310SM-H	1310nm Single-Mode Hardened Fiber SFP Transceiver

Related Models

Part No.	Description
Vi30128	28-port managed 10G Uplink PoE switch

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TEL (+1) 858-484-5209 • FAX (+1) 858-484-1205
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Notes

Transmitter Section

The transmitter section consists of a 1310 nm InGaAsP laser in an eye safe optical subassembly (OSA) which mates to the fiber cable. The laser OSA is driven by a LD driver IC which converts differential input LVPECL logic signals into an analog laser driving current.

TX_DISABLE

The TX_DISABLE signal is high (TTL logic “1”) to turn off the laser output. The laser will turn on when TX_DISABLE is low (TTL logic “0”).

Receiver Section

The receiver utilizes an InGaAs PIN photodiode mounted togther with a trans-impedance preamplifier IC in an OSA. This OSA is connected to a circuit providing post-amplication quantization, and optical signal detection.

Receive Loss (RX_LOS)

The RX_LOS is high (logic “1”) when there is no incoming light from the companion transceiver. This signal is normally used by the system for the diagnostic purpose. The signal is operated in TTL level.

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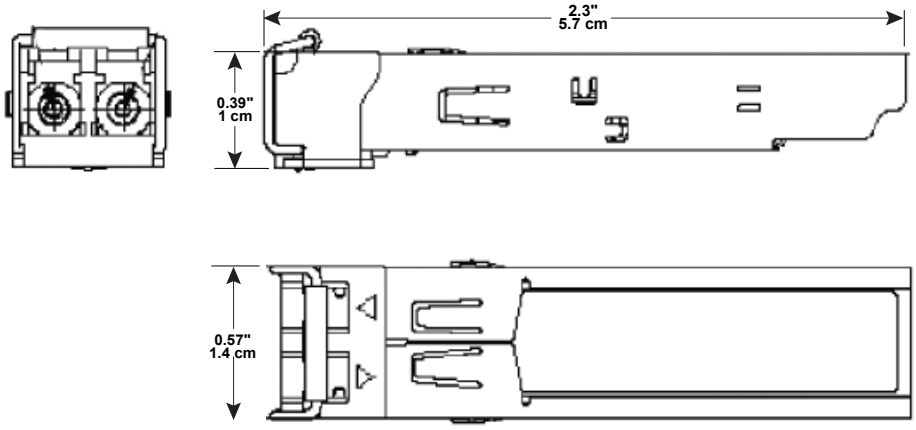
Mechanical Drawings



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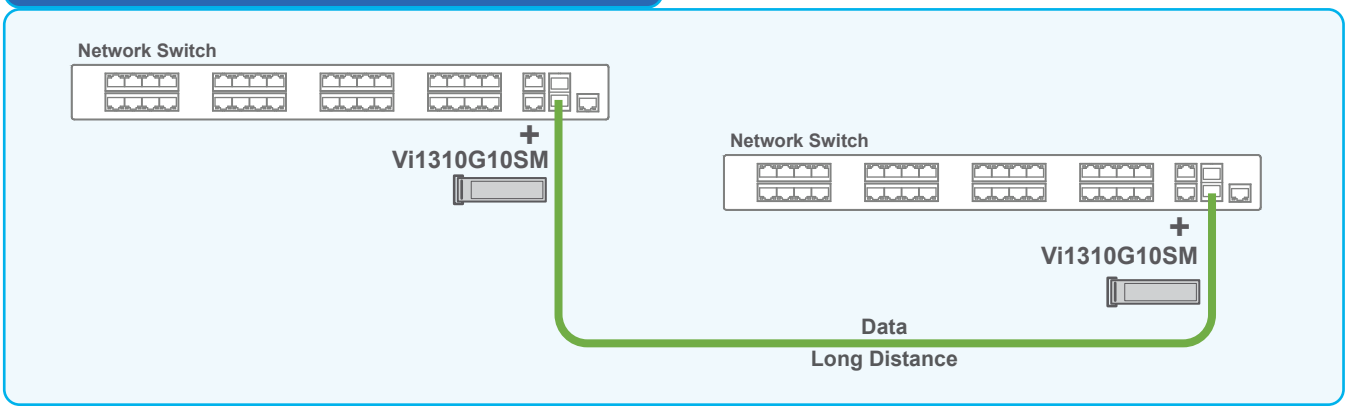
Application Drawings

Fiber Optics

Data transmission over Fiber Optic cables



The Vi1310G10SM can connect 2 network switches at long distances at 10,000Mbps data rate.

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