

12 Gbps video SFP+ transceiver

Description:

The **12G video SDI SFP+** optical cable module adds an LC fiber optic connection. The 12G data rates of the module allows you to use SD, HD and 4K resolutions. In addition, fiber optic communication allows long distance transmission without loss of quality in the signal.

The **12G video SFP+ transceiver** is designed to transmit/receive data rates from 50Mbps to 11.88Gbps, compliant with SMPTE ST 2082-1 (12G UHD-SDI), ST 2081-1 (6G UHD-SDI), ST424 (3G SDI), ST 292-1(HD-SDI), and ST 259 (SD-SDI). Video transceiver supports SDI pathological patterns signals. The **12G video SDI transceiver** includes these sections: DFB laser, PIN photodiode integrated with the trans-impedance preamplifier (TIA), Reclocker and a MCU controller.

The transceiver is compatible with SFP Multi-Source Agreement (MSA).

Features:



- Data rates from 50 Mbps to 11.88 Gbps
- Metal enclosure for Lower EMI
- Hot-pluggable SFP+ footprint
- 1310nm DFB laser transmitter
- Support pathological patterns for SD-SDI, HD-SDI
- 3G-SDI, 6G-SDI and 12G SDI
- The module's receiver contains reclocker
- Case operating temperature range: 0°C to 70°C
- Single 3.3.V power supply

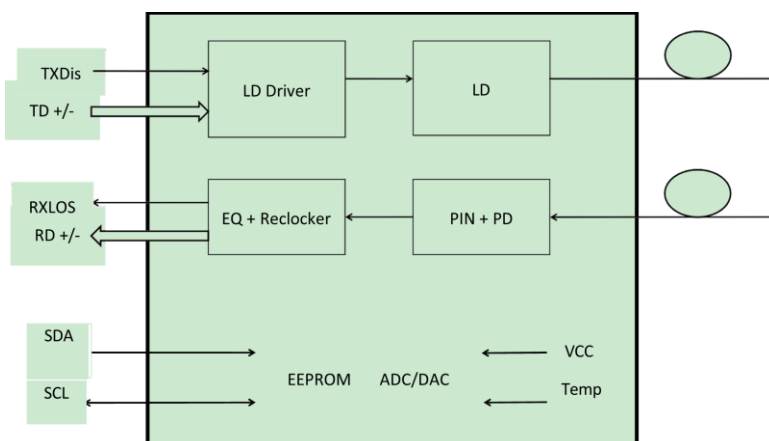
Standards:

- Compliant with SFF-8472 with duplex LC connector
- Compliant with SFP+ MSA
- RoHS Compliant (lead free)

Applications:

- Serial Digital Fiber Transmission System for SMPTE ST 259, SMPTE ST 344, SMPTE ST 292-1/2, SMPTE ST 424, SMPTE ST 2081-1 and SMPTE ST 2082-1 Signals
- UHD TV/HDTV/SDTV Service Interfaces

Module block diagram:



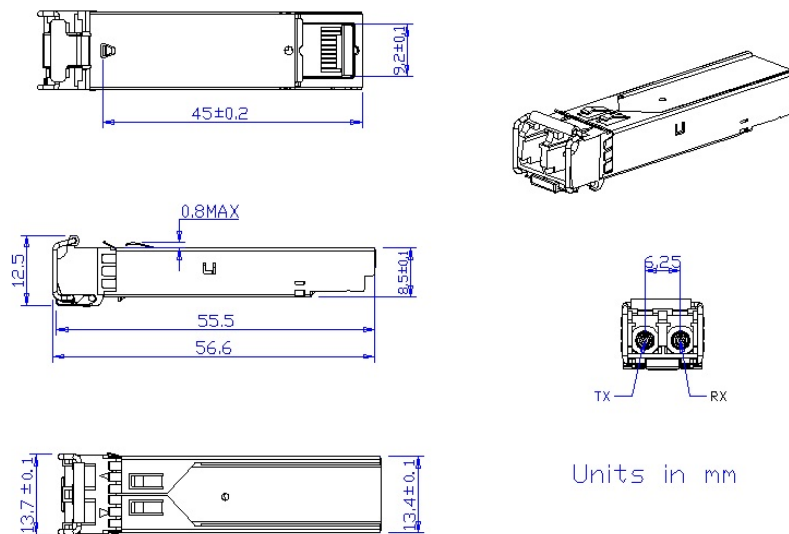
Safety and regulatory compliance:

Features	Standard
Laser Safety	IEC 60825-1:2014 (Third Edition)
Environmental protection	2011/65/EU
CE EMC	EN55032 : 2015 EN55035 : 2017 EN61000-3-2:2014 EN61000-3-3:2013
FCC	FCC Part 15, Subpart B; ANSI C63.4-2014
Product Safety	EN/UL 60950-1, 2nd Edition, 2014-10-14

Technical specifications:

Optical Transmit Power	-6 to -2 dBm
Optical Receiver Power	-12 dBm at 12 Gbps
Link Distance (Single Mode)	
Typical 6 km at 12 Gbps	Typical 12 km at 6 Gbps
Typical 25 km at 3 Gbps	Typical 35 km at 1.5 Gbps HD
Typical 45 km at 270 Mbps SD	

Outline Dimension:



Ordering code:

Part number	Description
S12-D31-SP-ER-D	12 Gbps, video SFP+, 1310 nm, up to 45 km over SM , duplex LC connector, 0°C to +70°C