

SFP28 Transceivers – 32 Gbps

Description:

The OPTOKON transceivers are compliant with SFP+ SFF-8431 and the SFP+ MSA. This upgrade, and reliability benefits by virtue of being hot-pluggable, also is designed for single-mode and multimode fiber with cost effective and high performance.

This hot-pluggable transceiver with SFP28 (Small Form Factor Pluggable) footprint features a Duplex LC connector provides 32 Gbps connectivity. Additionally, it provides a unique enhanced digital diagnostic monitoring interface, which allows real-time access to device operating parameters such as transceiver temperature, laser bias current, transmitted optical power, received optical power and transceiver supply voltage.



Features:

- Up to 28.05 Gbps bit rates
- Metal enclosure for lower EMI
- Hot-pluggable SFP+ footprint
- Integrated Digital Diagnostic monitoring
- Specifications compliant with SFF 8472
- Compliant with SFP+ MSA with LC connector
- Case operating temperature range: 0°C to 70°C
- Single 3.3.V power supply

Optical characteristics:

	Unit	SR	LR	Note
Average Output Power, 14.025 & 28.05 Gbps (min/max)	dBm	-7.8 & -6.2 / 2.0	-5 / 2.0	1, 2
Average Output Power, 8.05 Gbps (min/max)	dBm	-8.2 / 2.0	-8.4 / 0.5	1
Optical Modulation Amplitude (min/max)				
8.5 Gbps	dBm	-5.2	-5.4 / 3	
14.025 Gbps		-4.8	-2.0 / 3	
28.05 Gbps		-3.2	-2.0 / 3	
Unstressed receiver OMA sensitivity (max)				
8.5 Gbps	dBm	-11.2	-13.8	3
14.025 Gbps		-10.5	-12.0	
28.05 Gbps		-10.2	-11.4	
Maximum distance	m, km	70 or 100 m	10 km	
Fiber type	-	MM-OM3 or MM-OM4	SMF	
Optical link budget				
8.5 Gbps	dB	3	5.4	
14.025 Gbps		2.7	7	
28.05 Gbps		4	6.4	
Wavelength / laser type	nm	850 / VCSEL	1310 / DFB	
Power dissipation	W	< 1	< 1.5	

Notes: 1. Class 1 Laser Safety limit per FDA/CDRH, and EN (IEC) 60825 laser safety standards.
2. 3200-SM-LC-L OMA in dBm shall also exceed -5.0 TDP.
3. For 32GFC with FEC, receiver sensitivity is defined at 10⁻⁶ BER level, not 10⁻¹² BER level.

Standards:

- Compliant to SFF-8431
- Compliant to SFF 8472
- RoHS Compliant
- Compliant with FC-PI-6

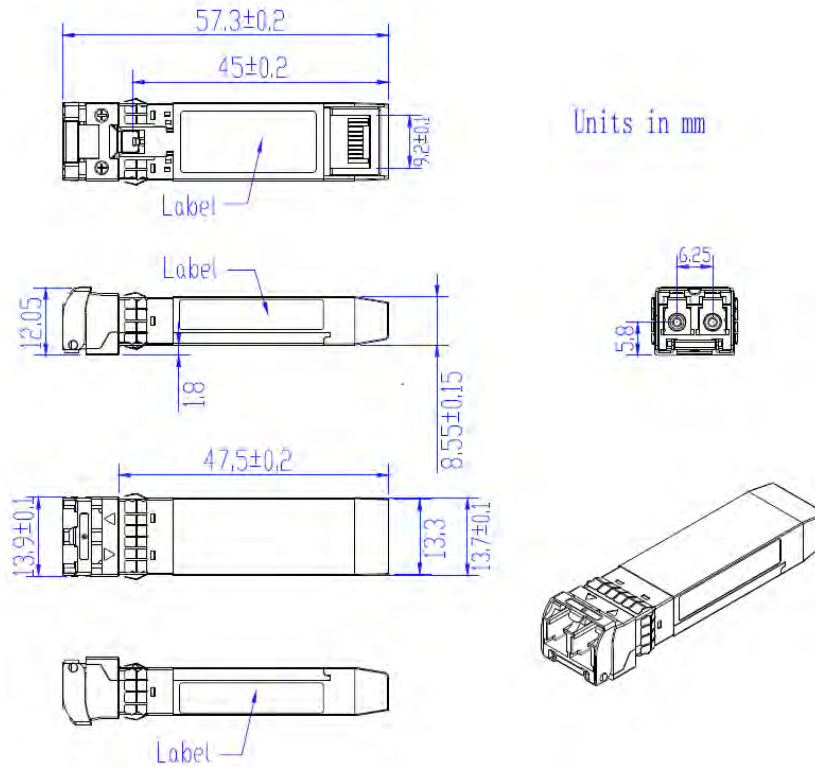
Applications:

Tri-Rate 8.5/14.025/28.05 Gbps Fiber Channel

Safety and Regulatory Compliance:

Electrostatic discharge (ESD)	IEC/EN 61000-4-2
Electromagnetic Interference (EMI)	FCC Part 15 Class B EN 55022 Class B (CISPR 22A)
Laser Eye Safety	FDA 21CFR 1040.10, 1040.11 IEC/EN 60825-1, 2: Class 1 laser product
Component Recognition	IEC/EN 60950, UL
RoHS	2011/65/EU and (EU)2015/863
EMC	EN 61000-3

Outline Dimension:



Ordering code:

Part number	Description
M32-V85-SP28-SR-D-XX	32 Gbps, SFP+, 850 nm, up to 100 m, M5E MMF (OM4), duplex LC connector, 0°C to +70°C
S32-D31-SP28-LR-D-XX	32 Gbps, SFP+, 1310 nm, up to 10 km, SM, duplex LC connector, 0°C to +70°C