

# SFP28 Transceivers - 25 Gbps

#### **Description:**

The 25 Gbps series of SFP28 are hot pluggable modules expressly designed for high speed communication applications that requiring rates of 25 Gbps. The transceivers are manufactured with LC receptacle that is compatible with the industry LC connector standard. All SFP28 transceivers have the digital diagnostic monitor feature.



	Unit	SR	LR003	LR	LR20	ER
Average output power (min/max)	dBm	-9.1 / 2.4	-7 / 2	-9 / -3	0 /5	-1.6 / 6
Receiver sensitivity	dBm	-11	-10	-18	-13.3	-19.6
Data rate	Gbps	25.78	25.78	25.78	25.78	25.78
Overload	dBm	2.4	0.5	-3	0.5	-5
Maximum distance	km	0.100	0.300	10	20	40
Fiber type	-	MMF	SMF	SMF	SMF	SMF
Optical link budget	dBm	1.9	3	9	13.3	18
Wavelength / Laser type	nm	850 / VCSEL	1310/ DFB	1310 /DFB	1310 /DFB	1310/ EML (DFB)

Table 1: Basic technical specifications according to distance.

## **Temperature:**

OPTOKON is always trying to satisfy as much market demand as possible and with this in mind, almost all OPTOKON SFP28 transceivers are manufactured in the commercial (D) and industrial (I) temperature ranges to provide you all possibilities you need for your application.

Code	Temperature
D	0 °C to + 70 °C
I	-40°C to + 85 °C

Table 2: Temperature specifications.

#### **Aplications:**

- 25G Ethernet
- CPRI 10

#### Standard:

- Compliant to SFF-8431
- Comppliant to SFF 8472
- Compliant to IEEE 802.3 CC
- RoHS Compliant





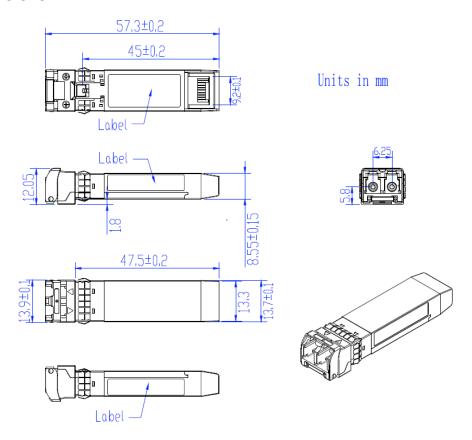
# Safety and regulatory compliance:

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	FDA31CFR 1040.11 IEC/EN 60825-1, 2 Class 1 laser product
Component Recognition	IEC/EN 60950, UL
RoHS	2002/95/EC
EMC	EN 61000-3

## Digital diagnostic compliance

All OPTOKON SFP28 transceivers are assembled with digital diagnostic feature as a standard.

#### **Dimmensions:**





### **Ordering codes for 25 Gbps SFP28 transceivers:**

#### **Standard series:**

Part number:	Speed [Gbps]	Distance [km]	Wavelength [nm]	Temperature	Fiber type	Connector
M25-V85-SP28-SR-D-XX	25.78	0.100	850	D, I	MMF	LC
S25-D31-SP28-LR003-D-XX	25.78	0.300	1310	D, I	SMF	LC
S25-D31-SP28-LR-D-XX	25.78	10	1310	D, I	SMF	LC
S25-D31-SP28-LR20-D-XX	25.78	20	1310	D, I	SMF	LC
S25-D31-SP28-ER-D-XX	25.78	40	1310	D, I	SMF	LC

#### **Bidirectional series:**

Part number:	Speed [Gbps]	Distance [km]	TX wavelength [nm]	Rx wavelength [nm]	Temp [-]	Fiber [-]	Connector [-]
S25-W27/33-SP28-LR-D-XX	25.78	10	1270	1330	D, I	SMF	LC
S25-W33/27-SP28-LR-D-XX	25.78	10	1330	1270	D, I	SMF	LC
S25-W27/33-SP28-LR20-D-XX	25.78	20	1270	1330	D, I	SMF	LC
S25-W27/33-SP28-LR20-D-XX	25.78	20	1330	1270	D, I	SMF	LC
S25-W27/33-SP28-ER-D-XX	25.78	40	1270	1330	D, I	SMF	LC
S25-W33/27-SP28-ER-D-XX	25.78	40	1330	1270	D, I	SMF	LC

#### LAN-WDM (LWDM) series:

Part number:	Speed	Distance	Wavelength	Temperature	Fiber type	Connector
	[Gbps]	[km]	[yy yy]	[-]	[-]	[-]
S25-Lyy yy-SP28-ER-D-XX	25.78	40	LWDM	D, I	SMF	LC

#### **LWDM** laser wavelength:

No.	уу	Wavelength
-	[-]	[nm]
1	86 66	1286.66
2	91 10	1291.10
3	95 56	1295.56
4	00 05	1300.05
5	04 58	1304.58
6	09 14	1309.14

## **LWDM** code examples:

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Part number:	Speed [Gbps]	Distance [km]	Wavelength [nm]	Temperature [-]	Fiber type [-]	Connector [-]
S25-L86 66-SP28-ER-D-XX	25.78	40	1286.66	0°C up to +70°C	SMF	LC
S25-L04 58-SP28-ER-D-XX	25.78	40	1304,58	0°C up to +70°C	SMF	LC
S25-L91 10-SP28-ER-I-XX	25.78	40	1291,10	-40°C up to +85°C	SMF	LC
S25-L09 14-SP28-ER-I-XX	25.78	40	1309,14	-40°C up to +85°C	SMF	LC

# Dual rate 10G/25G series:

Part number:	Speed [Gbps]	Distance [m]	Wavelength [nm]	Temperature [-]	Fiber type [-]	Connector [-]
M10/25-V85-SP28-SR-04-D-XX	10.31 / 25.78	400 / 100	850	D	MMF	LC
S10/25-D31-SP28-LR-I-XX	10.31 / 25.78	10	1310	D, I	SMF	LC