

QSFP+ Transceiver M40-V85-QP-SR4-XX-D

The **M40-V85-QP-SR4-XX-D** is designed to operate over **multi-mode fiber** system using 4x10G channels in 850 nm. It is compliant with the QSFP+ MSA and IEEE 802.3ba **40GBASE-SR4**. The optical transmitter portion of the transceiver incorporates a 4-channel VCSEL (Vertical Cavity Surface Emitting Laser) array, a 4-channel input buffer and laser driver, diagnostic monitors, control and bias blocks. For module control, the control interface incorporates a two wire serial interface of clock and data signals.



Features:

- High Channel Capacity: 40 Gbps per module
- Up to 11.1Gbps Data rate per channel
- Maximum link length of 100m links on OM3
- Maximum link length of 150m links on OM4
- High Reliability 850nm VCSEL technology
- Electrically hot-pluggable
- Digital diagnostic SFF-8436 compliant
- Compliant with QSFP+ MSA with MPO/MTP connector
- Case operating temperature range: 0 °C to 70 °C
- Power dissipation < 0.7 W

Application:

- 40G Ethernet
- Infiniband QDR
- Fiber channel

Safety and regulatory compliance and standards:

- Compliant to SFF-8436
- Compliant to 802.3ba
- RoHS Compliant

Distance:

Name	OM3	OM4
M40-V85-QP-SR4-02-D	100 m	150 m
M40-V85-QP-SR4-03-D	300 m	400 m

Digital Diagnostics Functions:

OPTOKON transceivers support the 2-wire serial communication protocol as defined in the QSFP+ MSA, which allows real-time access to the following operating parameters:

- Transceiver temperature
- Laser bias current
- Transmitted optical power
- Received optical power
- Transceiver supply voltage

	Unit	Type 02	Type 03
<i>Optical Wavelength (min – center -max)</i>	nm	840 – 850 – 860	
<i>Average output power per line (min / max)</i>	dBm	-7.6 / 0.5	- 7.6 / 1
<i>Average lunch power off per line (max)</i>	dBm	-30	-30
<i>Output Eye Mask</i>		Compliant with IEEE802.3ba	
<i>Optical Extinction ratio</i>	dB	3	3
<i>Receiver sensitivity per lane</i>	dBm	-9.5	-9.9
<i>Overload</i>	dBm	2.4	2.4
<i>Maximum distance</i>	m	150	400
<i>Fiber type</i>	-	MMF	MMF
<i>Data rate (Each line)</i>	Gbps	10.3125	10.3125
<i>Optical link budget</i>	dBm	1.9	2.3

[illegible]

Name	Description
M40-V85-QP-SR4-02-D-XX	40 Gbps, MM QSFP+: 4x 850 nm, distance: OM3 100 m, OM4 150 m, MPO/MTP connector, operational temperature 0 °C to +70 °C
M40-V85-QP-SR4-03-D-XX	40 Gbps, MM QSFP+: 4x 850 nm, distance: OM3 300 m, OM4 400 m, MPO/MTP connector, operational temperature 0 °C to +70 °C