

PRE-QSFP56DD-ZRXCN

QSFP-DD, ZR+, -7 to +4dBm, Tunable, C-Band, 400G, 120km (unamplified)



Product Features:

- Full DWDM C-band Tunable
- -7 to +4dBm TX Power
- Additional Vendor Custom Modes
- 1000km+ Reach (Amplified)
- 120km Reach (Unamplified)
- Duplex LC-UPC Connector
- C-Temp
- <19W Power Consumption
- Digital Diagnostics Monitoring (DDM)



Product Applications:

- Data Center Interconnect
- ROADM and Long Haul Networks
- DWDM 400G Ethernet/FlexO

Standards:

- QSFP-DD
- CMIS and C-CMIS
- RoHS

General Specifications:

Parameter	Min	Typical	Max	Unit
Case Operating Temperature	0	-	75	°C
Power Consumption	-	-	24.75 ¹	W
Power Supply Voltage	3.14	3.3	3.46	V
Operating Humidity	5	-	95	%
Storage Temperature	-40	-	85	°C
Transmission Distance	-	-	1000 ²	km
Data Rate (Total)	200	-	505.11	Gbps

1 - The actual module max power consumption will depend on the Application in use.

2 - Line System, dispersion limited links, G.652 fiber. Max reach will depend on network design

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Applications²:

Host				Media			
Host IF	FEC	Modulation	Baud Rate	Mode	FEC	Modulation	Baud Rate
400GAUI-8	RS(544,514)	PAM4	26.5625 GBd	400ZR	C-FEC	DP-16QAM	59.8 GBd
100GAUI-2	RS(544,514)	PAM4	26.5625 GBd	400ZR	C-FEC	DP-16QAM	59.8 GBd
400GAUI-8	RS(544,514)	PAM4	26.5625 GBd	ZR400-OFEC-16QAM	O-FEC	DP-16QAM	60.1 GBd
100GAUI-2	RS(544,514)	PAM4	26.5625 GBd	ZR400-OFEC-16QAM	O-FEC	DP-16QAM	60.1 GBd
400GAUI-8	RS(544,514)	PAM4	26.5625 GBd	FLEXO-4-DO-16QAM	O-FEC	DP-16QAM	63.1 GBd
100GAUI-2	RS(544,514)	PAM4	26.5625 GBd	FLEXO-4-DO-16QAM	O-FEC	DP-16QAM	63.1 GBd
400GAUI-8	RS(544,514)	PAM4	26.5625 GBd	Custom Mode ³	S-FEC	PSC-16QAM	69.9 GBd
100GAUI-2	RS(544,514)	PAM4	26.5625 GBd	Custom Mode ³	S-FEC	PSC-16QAM	69.9 GBd

2 - A shortened version of all the applications this module supports is shown here. Only non-muxponder 400G modes are interoperable with other modules using the same application. For the full supported list please reach out to your direct Sales/SE representative.

3 - The customized Vendor modes are not interoperable with other 400G modes and will need to be point to point vendor locked.

Optical Characteristics: Transmitter

Parameter	Min	Typical	Max	Unit
Tx Output Power Range	-7	-	4	dBm
Tx Output Power Resolution	-	-	0.1	dB
Tx Output Power Accuracy	-1	-	1	dB
Tx Output Power Stability	-1	-	1	dB
In-band OSNR	37	-	-	dB
Out-of-Band OSNR	45	-	-	dB
Tx Disable Power	-	-	-20	dBm
Tx Reflectance	-	-	-27	dBm
Frequency Range	191.25	-	196.125	THz
Frequency Fine Tuning	5	-	100	GHz

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Optical Characteristics: Receiver

Parameter		Min	Typical	Max	Unit
Rx Input Power (Unamplified OSNR>35dB)	400ZR	-21	-	5	dBm
	ZR400-OFEC-16QAM	-22		5	
	FLEXO-4-DO-16QAM	-21		5	
	Custom Mode	-23		5	
Rx Input Power (Amplified)	400ZR	-12	-	-7	dBm
	ZR400-OFEC-16QAM	-12		-7	
	FLEXO-4-DO-16QAM	-12		-7	
	Custom Mode	-12		-7	
Rx OSNR Tolerance	400ZR	-	-	24.8	dB/0.1nm
	ZR400-OFEC-16QAM	-		21.9	
	FLEXO-4-DO-16QAM	-		22.4	
	Custom Mode	-		19.8	
CD Tolerance	400ZR	-2400	-	2400	ps/nm
	ZR400-OFEC-16QAM	-81000		81000	
	FLEXO-4-DO-16QAM	-73500		73500	
	Custom Mode	-60000		60000	

Product Ordering Information

Part Number	Description
PRE-QSFP56DD-ZRXCN	QSFP-DD, ZR+, -7 to +4dBm, Tunable, C-Band, 400G, 120km (unamplified), SMF/LC, C-Temp

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