

# QSFP28 100G

## Product Guide

QSFP28-100G : Single-Rate ( 103.125 Gbps )										
Part Number	Wavelength per Lane (nm)		Media	Reach	Description	Avg. TX Power/Lane (dBm)		Avg. RX Power/Lane (dBm)		Max Power (watts)
						[min]	[max]	[min]	[max]	
QSFP28-SR4-100GD	850		MMF	70m (OM3)	QSFP28, 850nm, SR4 MMF 70m/100m 100G DDM, MPO connector	-8.4	2.4	-10.3	2.4	2.5
				100m (OM4)						
QSFP-100G-SRBD-V2	L0	850	MMF	100m (OM4)	QSFP28, Duplex SRBD v1.2 850nm, SR MMF, 100m OM4, 100G DDM, LC-Duplex connector	-6.2	4	-8.2	4	3.5
	L1	900								
QSFP28-LX4-100GD	L0	1271	MMF	150m (OM4)	QSFP28, 4CWDM Channels 1270-1330nm, LX4 MMF/SMF 150m/2km, 100G DDM, LC-Duplex connector	-5	2.5	-11.5	2.5	3.5
	L1	1291								
	L2	1311	SMF	2km						
	L3	1331								
QSFP28-PSM4-2-100GD	1310		SMF	2km	QSFP28, 1310nm, PSMIR4 SMF 2km 100G DDM, MPO8 angled connector	-6.5	2.5	-12.5	2	3.5
QSFP28-CWDM4-100GD	L0	1271	SMF	2km*	QSFP28, 1271-1331nm, CWDM4 (4-Channel Laser Driver) SMF 2km (w/FEC) 100G DDM, LC-Duplex connector	-6.5	2.5	-11.5	2.5	3.5
	L1	1291								
	L2	1311								
	L3	1331								
QSFP28-LR4-100GD	L0	1295	SMF	10km	QSFP28, 1295-1310nm, LR4 SMF 10km 100G DDM, LC-Duplex connector	-4.3	4.5	-10.6	4.5	4
	L1	1300								
	L2	1305								
	L3	1310								
QSFP28-ER4L-100GD	L0	1295	SMF	30km	QSFP28, 1295-1310nm, ER4-Lite SMF 30km (without/FEC) 40km (w/FEC) 100G DDM, LC-Duplex connector	-2.5	4.5	-15	-7	4.5
	L1	1300		40km				-18.5		
	L2	1305								
	L3	1310								
QSFP28-ER4-100GD	L0	1295	SMF	40km	QSFP28, 1295-1310nm, ER4 SMF 40km, 100G DDM, LC-Duplex connector	-2.9	4.5	-20.9	-5	4.5
	L1	1300								
	L2	1305								
	L3	1310								
QSFP28-ZR4-100GD	L0	1295	SMF	80km	QSFP28, 1295-1310nm, ZR4 EML SMF 80km (w/FEC) 100G DDM, LC-Duplex connector	2	4.5	-28	-7	5.5
	L1	1300								
	L2	1305								
	L3	1310								
QSFP28-ZR4+-100GD	L0	1295	SMF	100km	QSFP28, 1295-1310nm, ZR4+ EML SMF 100km (w/FEC) 100G DDM, LC-Duplex connector	3.5	6.5	-30	-5	5.5
	L1	1300								
	L2	1305								
	L3	1310								

QSFP28-100G/112G-OTU4 : Dual-Rate ( 103.125 / 111.81 Gbps )										
Part Number	Wavelength per Lane (nm)		Media	Reach	Description	Avg. TX Power/Lane (dBm)		Avg. RX Power/Lane (dBm)		Max Power (watts)
						[min]	[max]	[min]	[max]	
QSFP28-SR4	850		MMF	100m	Dual-Rates QSFP28, 850nm, SR4 MMF 100m, 100/112G-OTU4 DDM, MTP/MPO-8 connector	-9.1	2.4	-11	2.4	3.5
QSFP28-LR4	L0	1295	SMF	10km	Dual-Rates QSFP28, 1310nm, LR4 EML SMF 10km, 100G/112G-OTU4 DDM, LC-Duplex connector	-4.3	4.5	-8.6	4.5	4
	L1	1300								
	L2	1305								
	L3	1310								
QSFP28-ER4L	L0	1295	SMF	30km	Dual-Rates QSFP28, 1295-1310nm, ER4 Lite SMF 30km (without/FEC) 40km (w/FEC), 100/112G-OTU4 DDM (c-temp), LC-Duplex connector	2.5	4.5	-18.5	-7	5
	L1	1300								
	L2	1305								
	L3	1310								
QSFP28-ER4	L0	1295	SMF	40km	Dual-Rates QSFP28, 1294-1310nm, ER4 SMF 40km, 100/112G-OTU4 DDM, LC-Duplex connector	-2.9	4.5	-20.9	-5	5
	L1	1300								
	L2	1305								
	L3	1310								
QSFP28-ZR4	L0	1295	SMF	80km	Dual-Rates QSFP28, 1295-1310nm, ZR4 EML SMF 80km (w/FEC) 100G DDM, LC-Duplex connector	2	4.5	-30	-7	5.5
	L1	1300								
	L2	1305								
	L3	1310								

QSFP28-100G : Single-Lambda										
Part Number	Wavelength per Lane (nm)	Media	Reach	Description	Avg. TX Power/Lane (dBm)		Avg. RX Power/Lane (dBm)		Max Power (watts)	
					[min]	[max]	[min]	[max]		
QSFP28-DR1-100GD	1310	SMF	500m	Single-Lambda QSFP28, 1310nm, 100G-DR1 SMF 500m (w/FEC) 100G DDM, LC-Duplex connector	-2.9	4	-5.9	4	4.5	
QSFP28-FR1-100GD	1310	SMF	2km	Single-Lambda QSFP28, 1310nm, 100G-FR1 SMF 2km (w/FEC) 100G DDM, LC-Duplex connector	-2.4	4	-6.4	4.5	4.5	
QSFP28-LR1-100GD	1310	SMF	10km	Single-Lambda QSFP28, 1310nm, 100G-LR1 SMF 10km (w/FEC) 100G DDM, LC-Duplex connector	-1.4	4.5	-7.7	4.5	4.5	

QSFP28-100G-BiDi									
Part Number	Wavelength per Lane (nm)	Media	Reach	Description	Avg. TX Power/Lane (dBm)		Avg. RX Power/Lane (dBm)		Max Power (watts)
					[min]	[max]	[min]	[max]	
QSFP28-BXU-10-100GD	1271	SMF	10km	Single-Lambda QSFP28, (TX)~1271nm / (RX)~1331nm, 100G-LR1 SMF 10km (On board KP4-FEC) 100G DDM, LC-Simplex connector	-1.4	4.5	-7.7	4.5	4
	1331								
QSFP28-BXD-10-100GD	1331								
	1271								
QSFP28-BXU-30-100GD	1304.58	SMF	30km	Single-Lambda QSFP28, (TX)~1304nm / (RX)~1309nm, 100G-ELR1 SMF 30km (On board KP4-FEC) 100G DDM, LC-Simplex connector	0	5.6	-14.7	-3.4	4
	1309.14								
QSFP28-BXD-30-100GD	1309.14								
	1304.58								
QSFP28-BXU-40-100GD	1304.58	SMF	40km	Single-Lambda QSFP28, (TX)~1304nm / (RX)~1309nm, 100G-ERL1 SMF 40km (On board KP4-FEC) 100G DDM, LC-Simplex connector	1.7	7.1	-16	-3.4	4.5
	1309.14								
QSFP28-BXD-40-100GD	1309.14								
	1304.58								

QSFP28-DAC (Copper Cable)		
Cable Type	Description	Lengths
QSFP28 to QSFP28	QSFP28 to QSFP28, CR4 100G, Xm Passive Copper Cable	up to 5m
QSFP28 to 2xSFP28	QSFP28 to 2xSFP28 (25G), CR4 50G, Xm Passive Copper Cable	up to 5m
QSFP28 to 4xSFP28	QSFP28 to 4xSFP28 (25G), CR4 100G, Xm Passive Copper Cable	up to 5m

QSFP28-AOC (Fiber Cable)		
Cable Type	Description	Lengths
QSFP28 to QSFP28	QSFP28 to QSFP28, SR4 100G/EDR, Xm Active Optical Cable	up to 100m
QSFP28 to 2xSFP28	QSFP28 to 2xSFP28 (25G), SR4 50G, Xm Active Optical Cable	up to 100m
QSFP28 to 4xSFP28	QSFP28 to 4xSFP28 (25G), SR4 100G Xm Active Optical Cable	up to 100m