

10G Ethernet SFP+ Family

SR | LRM | LR | LR40 | ER | ZR | eZR120

1. Product overview

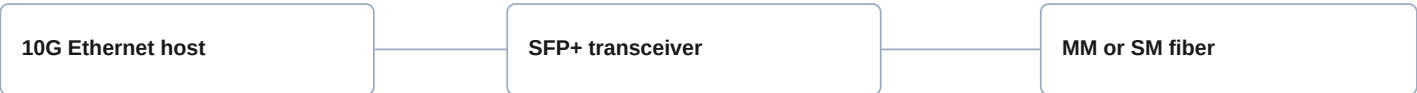
The GLOBALfiber 10G Ethernet SFP+ family comprises seven optical transceiver variants for multimode and single-mode fiber. The family covers the stated link distances from 220 m to 120 km, with wavelengths of 850 nm, 1310 nm and 1550 nm. Digital Diagnostic Monitoring (DDM) is listed for every ordering variant.

2. Key features

- SFP+ form factor for 10G Ethernet
- Seven variants for multimode or single-mode fiber
- 850 nm, 1310 nm and 1550 nm wavelength options
- DDM specified across the family
- Operating temperature: 0°C to +70°C for every variant
- LRM: 220 m over OM1/OM2; electronic dispersion compensation (EDC) required

3. Applications

10G Ethernet optical links. Select SR or LRM for the specified multimode applications, and LR, LR40, ER, ZR or eZR120 for the stated single-mode distances.



4. Technical data

Parameter	Specification
Form factor / service	SFP+ / 10G Ethernet
Fiber types	MM: multimode; SM: single-mode
Optical wavelengths	850 / 1310 / 1550 nm, depending on variant
Stated ordering reaches	SR 300 m; LRM 220 m; LR 10 km; LR40 and ER 40 km; ZR 80 km; eZR120 120 km
Monitoring	DDM listed for all seven products
LRM requirement	OM1/OM2 fiber; requires EDC

5. Recommended operating conditions

Parameter	Specification
Operating temperature	0°C to +70°C, all variants
Supply voltage / power consumption	Not specified in the original family datasheet
Storage temperature	Not specified in the original family datasheet

10G Ethernet SFP+ Family

6. Optical characteristics

Product number	Fiber	Wavelength (nm)	TX power (dBm)	RX sensitivity* (dBm)	Budget (dB)	Temp. (°C)
S10G-SR	MM	850	-6 to -1	-10 to 0	4	0 to 70
S10G-LRM	MM	1310	-6 to -1	-10 to 0	4	0 to 70
S10G-LR	SM	1310	-6 to +1	-15 to +1	9	0 to 70
S10G-LR40	SM	1310	-1 to +4	-16 to 0	15	0 to 70
S10G-ER	SM	1550	-1 to +4	-16 to 0	15	0 to 70
S10G-ZR	SM	1550	0 to +5	-23 to -8	23	0 to 70
S10G-eZR120	SM	1550	+1 to +5	< -25	26	0 to 70

*The original labels these values "Opt. Receiver Sensitivity". Ranges are retained as stated; their upper limits are not reclassified as receiver overload.

7. Digital diagnostics and management

Digital Diagnostic Monitoring (DDM) is included in every product description. Monitored parameters, accuracy, thresholds and management-interface details are not specified in the original family datasheet.

8. Safety and regulatory

The original family datasheet provides no laser-safety class, regulatory certifications or standards-compliance declarations. No additional compliance claims are made here.

9. Ordering information

Parameter	Specification
S10G-SR	SFP+, 10GE, DDM; 300 m; 850 nm; 4 dB; MM
S10G-LRM	SFP+, 10GE, DDM; 220 m, OM1/OM2; 1310 nm; 3.4 dB; MM; requires EDC
S10G-LR	SFP+, 10GE, DDM; 10 km; 1310 nm; 9 dB; SM
S10G-LR40	SFP+, 10GE, DDM; 40 km; 1310 nm; 16 dB; SM
S10G-ER	SFP+, 10GE, DDM; 40 km; 1550 nm; 15 dB; SM
S10G-ZR	SFP+, 10GE, DDM; 80 km; 1550 nm; 23 dB; SM
S10G-eZR120	SFP+, 10GbE-eZR, DDM; 120 km; 1550 nm; 26 dB; SM

Product numbers use the GLOBALfiber S10G prefix. Source date: 20 October 2024. Differences in power budget are documented in the separate source comments.