10G Ethernet SFP+ BiDi Family

BX10D | BX40D | BX60D | BX80D

1. Product overview

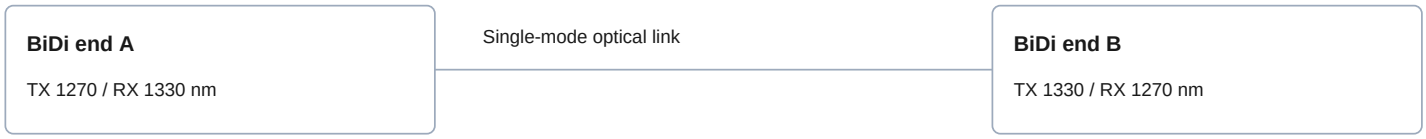
The GLOBALfiber 10G Ethernet SFP+ BiDi family comprises eight single-mode optical transceiver variants with stated reaches of 10, 40, 60 and 80 km. Complementary transmit and receive wavelengths provide bidirectional operation. All listed products include Digital Diagnostic Monitoring (DDM) and an LC optical interface.

2. Key features

- SFP+ BiDi transceivers for 10G Ethernet
- Single-mode fiber and LC optical interface
- 10 km, 40 km and 60 km pairs: 1270 / 1330 nm
- 80 km pair: 1490 / 1550 nm
- Power budgets: 9, 14, 20 and 23 dB, depending on variant
- DDM specified on all eight products
- Operating temperature: 0°C to +70°C

3. Applications

Bidirectional 10G Ethernet links over single-mode fiber. Use complementary TX/RX wavelength variants at opposite ends of the link, selected for the stated reach and power budget.



4. Technical data

Parameter	Specification
Form factor / service	SFP+ BiDi / 10G Ethernet
Fiber / connector	Single-mode (SM) / LC
10 km pair	S10G-BX10D-23 and S10G-BX10D-32; 9 dB budget
40 km pair	S10G-BX40D-23 and S10G-BX40D-32; 14 dB budget
60 km pair	S10G-BX60D-23 and S10G-BX60D-32; 20 dB budget
80 km pair	S10G-BX80D-45 and S10G-BX80D-54; 23 dB budget
Monitoring	DDM listed for every product

5. Recommended operating conditions

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

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6. Optical characteristics

Product number	Fiber	TX / RX (nm)	TX power (dBm)	RX sensitivity* (dBm)	Budget (dB)
S10G-BX10D-23	SM	1270 / 1330	-5 to 0	-14 to 0	9
S10G-BX10D-32	SM	1330 / 1270	-5 to 0	-14 to 0	9
S10G-BX40D-23	SM	1270 / 1330	-1 to +4	-15 to 0	14
S10G-BX40D-32	SM	1330 / 1270	-1 to +4	-15 to 0	14
S10G-BX60D-23	SM	1270 / 1330	0 to +5	-20 to -7	20
S10G-BX60D-32	SM	1330 / 1270	0 to +5	-20 to -7	20
S10G-BX80D-45	SM	1490 / 1550	0 to +4	< -23	23
S10G-BX80D-54	SM	1550 / 1490	0 to +4	< -23	23

All variants: 0°C to +70°C. *The source labels these values “Opt. Receiver Sensitivity”. The stated ranges are retained; their upper values are not reclassified as receiver overload.

7. Digital diagnostics and management

Digital Diagnostic Monitoring (DDM) is listed for all products. Monitoring accuracy, alarm thresholds and management-interface details are not specified in the original family datasheet.

8. Safety and regulatory

No laser-safety class, regulatory certifications or standards-compliance declarations are provided in the original family datasheet. No additional compliance claims are made here.

9. Ordering information

Parameter	Specification
S10G-BX10D-23	SFP+ BiDi, 10GE, DDM; SM; 10 km; TX/RX 1270/1330 nm; 9 dB; LC
S10G-BX10D-32	SFP+ BiDi, 10GE, DDM; SM; 10 km; TX/RX 1330/1270 nm; 9 dB; LC
S10G-BX40D-23	SFP+ BiDi, 10GE, DDM; SM; 40 km; TX/RX 1270/1330 nm; 14 dB; LC
S10G-BX40D-32	SFP+ BiDi, 10GE, DDM; SM; 40 km; TX/RX 1330/1270 nm; 14 dB; LC
S10G-BX60D-23	SFP+ BiDi, 10GE, DDM; SM; 60 km; TX/RX 1270/1330 nm; 20 dB; LC
S10G-BX60D-32	SFP+ BiDi, 10GE, DDM; SM; 60 km; TX/RX 1330/1270 nm; 20 dB; LC
S10G-BX80D-45	SFP+ BiDi, 10GE, DDM; SM; 80 km; TX/RX 1490/1550 nm; 23 dB; LC
S10G-BX80D-54	SFP+ BiDi, 10GE, DDM; SM; 80 km; TX/RX 1550/1490 nm; 23 dB; LC

Product number prefix updated from SFP-10G to S10G as requested. Variant suffixes and all technical values are retained. Original family datasheet dated 20 October 2024.