SFP-DD 100G to QSFP56 DAC

SFP-DD 100G to QSFP56 100G · 100G · 2 × 53.125 Gb/s PAM4 · passive copper twinax · 0.5 to 3 m

The GLOBALfiber S100G-DD-Q-DAC is a 100G passive direct attach copper (DAC) twinax cable that breaks out one SFP-DD 100G port to QSFP56 100G ports. It is used for short, low-cost links inside a rack or to adjacent racks. Passive cables need no power for signal conditioning; the host SerDes drives the link.

KEY FEATURES

- SFP-DD 100G to QSFP56 100G, hot-pluggable breakout
- 100G: 2 × 53.125 Gb/s PAM4
- Passive copper twinax, no signal conditioning
- Lengths 0.5 to 3 m, 26 / 30 AWG
- EEPROM with cable identification (SFF-8472 / SFF-8636 / CMIS)
- Power < 0.1 W
- Case temperature 0 to +70 °C

APPLICATIONS & COMPATIBILITY

- Server, storage and switch interconnects inside the rack and to adjacent racks; breakout from a high-speed port to lower-speed ports
- Coding available for the major switch and router vendors. Specify the host equipment when ordering.
- Provide equipment model, port configuration and software version so support can be checked. Coding does not confirm compatibility with every model or mode.

KEY SPECIFICATIONS

Type	Passive DAC
Ends	SFP-DD 100G / QSFP56 100G
Data rate	100G
Lanes	2 × 53.125 Gb/s PAM4
Lengths	0.5 to 3 m
Wire gauge	26 / 30 AWG
Power	< 0.1 W
Case temperature	0 to +70 °C

ORDERING INFORMATION

GLOBALfiber item	Description
S100G-DD-Q-DAC	100GbE SFP56-DD to QSFP56 Passive Copper DAC Cable

Other coding on request: salg@globalfiber.no.

ABSOLUTE MAXIMUM RATINGS

Parameter	Min	Max	Unit
Supply voltage	-0.3	3.6	V
Storage temperature	-40	85	°C
Relative humidity (non-condensing)	5	95	%

RECOMMENDED OPERATING CONDITIONS

Parameter	Min	Typ	Max	Unit
Case temperature	0	–	70	°C
Supply voltage	3.135	3.3	3.465	V

CABLE CHARACTERISTICS

Parameter	Specification
Differential impedance	100 Ω nominal (90–110 Ω)

MANAGEMENT & DIAGNOSTICS

- Cable identification EEPROM over 2-wire serial interface
- No optical DDM (passive cable)

COMPLIANCE

- IEEE 802.3cd (100GBASE-CR2)
- SFP-DD MSA, SFF-8665
- RoHS compliant

INSTALLATION NOTES

- Use in SFP-DD 100G host ports and QSFP56 100G ports. Confirm host support, port mode, FEC and software version before deployment.
- Breakout: the host port must be configured for breakout mode.
- Respect the minimum bend radius and avoid strain on the connectors.
- Select the shortest length that fits the route; longer passive cables need host FEC.

All trademarks are the property of their respective owners. GLOBALfiber products are third-party compatible and are not manufactured or endorsed by the equipment vendors. Specifications are subject to change without notice.