

SFP-6G

6.144Gb/s CPRI/OBSAI Mobile fronthaul SFP transceiver family

DESCRIPTION

The SFP-6G optical transceivers are fully compliant with the SFP Multi-Source Agreement (MSA). The modules are hot pluggable and digital diagnostic functions are available via an I2C serial bus specified in the SFP MSA SFF-8472.

The transceivers are designed for use in mobile fronthaul / wireless networks and are compatible with CPRI and OBSAI standards. SFP-6G supports up to 300 m transmission at 850nm on multimode fiber and up to 80 km at 1550nm on singlemode fiber.

APPLICATIONS

- CPRI 2.457 Gbps - 6.144 Gbps
- OBSAI 2.457 Gbps - 6.144 Gbps

FEATURES

- Up to 300 m transmission on MM fiber
- Up to 80 km transmission on SM fiber
- Supports CPRI/OBSAI data rates from 2.457 Gbps to 6.144 Gbps (CPRI line rates 3-6)
- SFF-8472 Digital Diagnostic Monitoring
- Hot-Pluggable SFP footprint
- Duplex LC interface for fiber pair operation
- Compatible with Small-Form Pluggable (SFP) MSA
- Standard operating temperature -40 °C to 85 °C
- Single +3.3 V power supply



LASER SAFETY

This transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or a dust plug.

OPTICAL PARAMETERS

Part no.	Fiber type	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SFP-6G-SD	MM	850	-5 to -1	-10 to -1	5
SFP-6G-L10D	SM	1310	-8 to 1	-15 to 1	7
SFP-6G-L40D	SM	1550	-5 to 4	-16 to -1	11
SFP-6G-L80D	SM	1550	0 to 4	-24 to -7	24

ORDERING INFORMATION

Part no.	Description
SFP-6G-SD	SFP, CPRI/OBSAI 6.144 Gbps, DDM, 300m, 850nm, 5dB, MM, Rugged
SFP-6G-L10D	SFP, CPRI/OBSAI 6.144 Gbps, DDM, 10km, 1310nm, 7dB, SM, Rugged
SFP-6G-L40D	SFP, CPRI/OBSAI 6.144 Gbps, DDM, 40km, 1550nm, 11dB, SM, Rugged
SFP-6G-L80D	SFP, CPRI/OBSAI 6.144 Gbps, DDM, 80km, 1550nm, 24dB, SM, Rugged