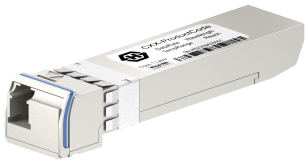
DATA SHEET

# Transceivers
# **25G SFP28 Bidi LR**
# CSB-412A08

## Properties

- Multi-protocol support
- Data rate 9.83...11.3 / 24.33...25.78 Gbps
- Reach up to 10km
- Wavelength 1270/1330 or 1330/1270nm
- LC/PC simplex connector
- Singlemode fiber
- Temp. range -40 ... 85°C
- Link budget at least 8 dB



| General data | |
|---|---|
| Form factor | SFP28 |
| Product image | Actual product may differ from the images shown. Colours, design, and details can vary. |
| Protocol | 10/25G Ethernet, eCPRI, CPRI 7/8/10 |
| Data rate standards | 25GBASE-LR |
| | 25G eCPRI |
| | CPRI Option 7,8,10 |
| Media type | Singlemode |
| Connector | LC/PC simplex |
| Modulation Format | NRZ |
| Built-in FEC | No |
| CDR | Double, with bypass by LOL |
| Operation temperature | -40 °C ... 85 °C |
| Supply voltage typical | 3.14 V ... 3.47 V |
| Supply Current | < 300 mA |
| Power consumption | < 1.2 W |
| Digital Diagnostic Management (DDM) | Yes |
| Laser hazard level | 1 |

| Absolute Maximum Ratings | |
|---|---|
| Max. supply voltage range | -0.3 V ... 4 V |
| Max. Storage Temperature Range | -40 °C ... 85 °C |
| Max. relative humidity range | 5 % ... 95 % |

Transceivers

# 25G SFP28 Bidi LR

CSB-412A08

| Transmitter Specifications | |
|---|---|
| Laser Type | Uncooled DFB |
| Operating channels | 1270nm (1260.00 to 1280.00nm) |
| | 1330nm (1320.00 to 1340.00nm) |
| Grid | None |
| Available Wavelength in nm | Tx 1270nm/Rx 1330nm |
| | Tx 1330nm/Rx 1270nm |
| Average launch power per lane | -4 dBm ... 4 dBm |
| Extinction Ratio | > 3.5 dB |
| Side Mode Suppression | > 30 dB |
| Supported Data rate | 9.83 Gbps ... 11.3 Gbps / 24.33 Gbps ... 25.78 Gbps |

| Receiver Specifications | |
|---|---|
| Receiver Type | PIN |
| Operating channels | 1270nm (1260.00 to 1280.00nm) |
| | 1330nm (1320.00 to 1340.00nm) |
| Receiver Overload | > 0.5 dBm |
| Receiver Sensitivity | < -12 dBm |
| Bit Error Rate at Receiver | 5E-5 |
| Receiver LOS De-Assert | < -13 dBm |
| Receiver LOS Assert | > -30 dBm |
| Receiver LOS Hysteresis | > 0.5 dB |
| Supported Data rate | 9.83 Gbps ... 11.3 Gbps / 24.33 Gbps ... 25.78 Gbps |

| Ordering Information Table | | |
|---|---|---|
| Order Code | Compatibility code explanation | Wavelength code explanation |
| CSB-412A08xxxx-ww | "xxxx" is an alphanumerical string, describing the compatibility. "0000" means no special coding to ensure compatibility with a special switch type. | -23: 1270nm Laser / 1330nm Receiver |
| | | -32: 1330nm Laser / 1270nm Receiver |

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.
DOCUMENT PIM-P43769 / Date of publication: 28.10.2026 / uncontrolled copy