DATA SHEET

Transceivers
1G SFP Bidi EZX
CSB-345A31

Properties

- Multi-protocol support
- Data rate 125 Mbps and 1.0625...1.25 Gbps
- Reach up to 120km
- Wavelength 1490/1550nm
- LC/PC simplex connector
- Singlemode fiber
- Temp. range -40 ... 85°C
- Link budget at least 31 dB
- Power consumption < 1 W



General data	
Form factor	SFP
Product image	Actual product may differ from the images shown. Colours, design, and details can vary.
Protocol	1G Ethernet, 1G Fiber Channel, CPRI 2
Data rate standards	1000BASE-EZX
	CPRI Option 2
Media type	Singlemode
Connector	LC/PC simplex
Modulation Format	NRZ
Built-in FEC	No
CDR	none
Operation temperature	-40 °C ... 85 °C
Supply voltage typical	3.13 V ... 3.47 V
Supply Current	< 300 mA
Power consumption	< 1 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 %

Transmitter Specifications	
Laser Type	Uncooled DFB
Grid	None
Average launch power per lane	0 dBm ... 5 dBm

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Transmitter Specifications	
Extinction Ratio	< 9 dB
Side Mode Suppression	> 30 dB
Supported Data rate	125 Mbps / 1.0625 Gbps ... 1.25 Gbps

Receiver Specifications	
Receiver Type	APD
Receiver Overload	> -10 dBm
Receiver Sensitivity	< -31 dBm
Bit Error Rate at Receiver	1E-12
Receiver LOS De-Assert	< -32 dBm
Receiver LOS Assert	> -40 dBm
Receiver LOS Hysteresis	> 0.5 dB
Supported Data rate	125 Mbps / 1.0625 Gbps ... 1.25 Gbps
Maximum Receiver Power (Damage Threshold)	> -10 dBm

Ordering Information Table		
Order Code	Compatibility code explanation	Wavelength code explanation
CSB-345A31xxxx-ww	"xxxx" is an alphanumerical string, describing the compatibility. "0000" means no special coding to ensure compatibility with a special switch type.	-45: 1490nm Laser / 1550nm Receiver -54: 1550nm Laser / 1490nm Receiver

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DOCUMENT PIM-P42718 / Date of publication: 02.11.2026 / uncontrolled copy