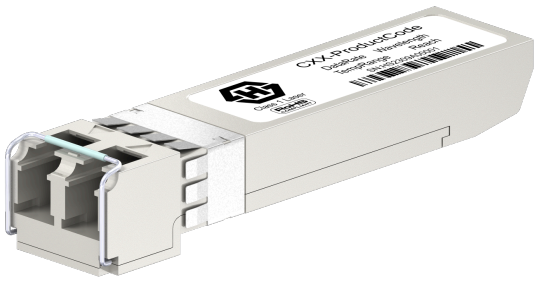
DATA SHEET

Transceivers
10G SFP+ ZR
CSS-904A23

Properties

- Multi-protocol support
- Data rate up to 11.3 Gbps
- Reach up to 80km
- Wavelength 1550nm
- LC/PC duplex connector
- Singlemode fiber
- Temp. range 0 ... 70°C
- Link budget at least 23 dB (w/o dispersion penalty)



General data	
Form factor	SFP+
Product image	Actual product may differ from the images shown. Colors, design, and details can vary.
Protocol	1/10G Ethernet, 1/2/4/8/10G FC, STM-64/OC-48, CPRI Option 2...8, OBSAI
Data rate standards	10GBASE-ZR/ZW
	CPRI Option 2 to 8
Media type	Singlemode
Connector	LC/PC duplex
Modulation Format	NRZ
Built-in FEC	No
CDR	none
Operation temperature	0 °C ... 70 °C
Supply voltage typical	3.13 V ... 3.47 V
Supply Current	< 400 mA
Power consumption	1.3 W
Digital Diagnostic Management (DDM)	Yes
Laser hazard level	1

Absolute Maximum Ratings	
Max. supply voltage range	-0.5 V ... 4 V
Max. Storage Temperature Range	-40 °C ... 85 °C
Max. relative humidity range	5 % ... 95 %

Transmitter Specifications	
Laser Type	EML
Operating Wavelength Range	1530 nm ... 1565nm
Grid	None
Average launch power per lane	0 dBm ... 4 dBm

Transceivers

10G SFP+ ZR

CSS-904A23

Transmitter Specifications	
Dispersion Penalty	< 3 dB
Dispersion range	-400 ps/nm ... 1600ps/nm
Extinction Ratio	> 8.2 dB
Side Mode Suppression	> 30 dB
Supported Data rate	1.0625 Gbps ... 11.3 Gbps

Receiver Specifications	
Receiver Type	APD
Operating Wavelength Range	1260 nm ... 1620nm
Receiver Overload	> -6 dBm
Receiver Sensitivity	< -23 dBm
Bit Error Rate at Receiver	1E-12
Receiver LOS De-Assert	< -27 dBm
Receiver LOS Assert	> -35 dBm
Receiver LOS Hysteresis	> 0.5 dB
Supported Data rate	1.0625 Gbps ... 11.3 Gbps
Maximum Receiver Power (Damage Threshold)	> -6 dBm

Ordering Information Table		
Order Code	Compatibility code explanation	Wavelength code explanation
CSS-904A23xxxx-15	“xxxx” is an alphanumerical string, describing the compatibility. “0000” means no special coding to ensure compatibility with a special switch type.	-15: 1550nm

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-P28481 / Date of publication: 29.01.2026 / uncontrolled copy