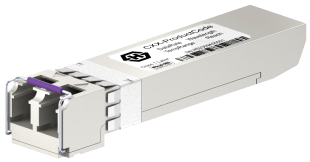
DATA SHEET

Transceivers
1G SFP CWDM EX
CSS-307A19

Properties

- Multi-protocol support
- Data rate 125 Mbps and 1.0625...1.25 Gbps
- Reach up to 40km
- Any ITU CWDM channel between 1271nm and 1611nm
- LC/PC duplex connector
- Singlemode fiber
- Temp. range 0 ... 70°C
- Link budget at least 19 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-EX
	CPRI Option 2
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	< 300 mA
Power consumption	< 1 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 %

HUBER+SUHNER

Transceivers

1G SFP CWDM EX

CSS-307A19

Transmitter Specifications	
Laser Type	Uncooled DFB
Grid	CWDM 20nm
Available Wavelength in nm	Any ITU CWDM channel between 1271nm and 1611nm
Channel Spacing	20 nm
Average launch power per lane	-5 dBm ... 0 dBm
Extinction Ratio	> 9
Side Mode Suppression	> 30 dB
Supported Data rate	125 Mbps / 1.0625 Gbps ... 1.25 Gbps

Receiver Specifications	
Receiver Type	PIN
Operating Wavelength Range	1260 nm ... 1620nm
Receiver Overload	> -1 dBm
Receiver Sensitivity	< -24 dBm
Bit Error Rate at Receiver	1E-12
Receiver LOS De-Assert	< -25 dBm
Receiver LOS Assert	> -38 dBm
Receiver LOS Hysteresis	> 0.5
Supported Data rate	125 Mbps / 1.0625 Gbps ... 1.25 Gbps

Ordering Information Table		
Order Code	Compatibility code explanation	Wavelength code explanation
CSS-307A19xxxx-ww	“xxxx” is an alphanumerical string, describing the compatibility. “0000” means no special coding to ensure compatibility with a special switch type.	-ww: CWDM channel chosen from table at the end

Channel Allocation			
Code	Wavelength (nm)	Code	Wavelength (nm)
-27	1271	-47	1471
-29	1291	-49	1491
-31	1311	-51	1511
-33	1331	-53	1531
-35	1351	-55	1551
-37	1371	-57	1571
-39	1391	-59	1591
-41	1411	-61	1611
-43	1431		
-45	1451		

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