



Broadstick Transceivers 1G SFP SX 850nm 550m for Cisco



BS1GSFPCISSX

Broadstick provides Cisco compatible transceivers that meet the industry standards. All transceivers are standards-based and comply with the MSA.



FormType	SFP	Max Distance	550 mts
Wavelength	850nm	DomSupport	Yes
Interface	LC duplex	Speed	1Gbps
Tx Power	-9db to -0db	Rx Sensitive	-11db
Compatible	Cisco	TempRange	0 to 70 °C

These transceivers are manufactured using the best quality components available. Our commitment to quality means we produce a consistent, standardized product, purpose-built for compatibility with today's top Original Equipment Manufacturer (OEM) specifications.

Our factory has the ISO 9001 certification and our devices are tested in fabric.



The installation a Broadstick transceiver does not affect your network equipment warranty. The equipment manufacturers have all the guidelines stating that warranty support on their products and it will not be affected.

Remember that Installing an OEM transceiver does not affect your network equipment warranty. The equipment manufacturers have all the guidelines stating that warranty support on their products and it will not be affected. This transceivers are compatible the use of it do not affect the CPU of the equipment and will not affect the Network performance.

For more information please contact sales@broadstick.com

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Broadstick provides common distance ranges within each transceiver model:

- SX/SR Short hauls with a range up to 2km.
- LX/LR Long hauls with a range up to 10km. We are also able to provide long haul with enhanced lasers capable of 40km.
EX/ER Extended reaches with range up to 40km with GBIC/SFP as well as with 10Gb/s transceivers.
- ZX/ZR/EZX Extended reach with range up to 120km with GBIC/SFP and 80km with 10Gb/s transceivers

Our devices and factories have passed many quality system verifications, like CE, RoHS, FCC, that compliant with international quality standards that assure the production. We strictly implement the standardized management to control the design, production, and service.



Broadstick provides custom SFP fully compatible transceivers that meet the industry standards. All transceivers are standards based and comply with the MSA. The part number of one SFP transceiver can be constructed with the next table. Use as reference the part number **BS1GSFPCISSX** to request a 1G SFP 850nm 550m for a CISCO equipment transceiver.

Broadstick	
BS	Broadstick

Bandwidth	
10G	10G

Form Type	
SFP	SFP+
XFP	XFP
BDU	BIDI SFP+ UP
BDD	BIDI SFP+ DOWN

Brand	
CIS	Cisco
JUN	Juniper
HPE	HP
FGT	Fortigate
HWI	Huawei
DEL	Dell
ALC	Alcatel
XXX	CUSTOM

Distance	
SR	850nm 300mts
LR	1310nm 10Km
LR2	20Km
ER	40Km
ZR	80Km
ZR2	100Km
RJ	RJ45 100mts
Custom	XXX



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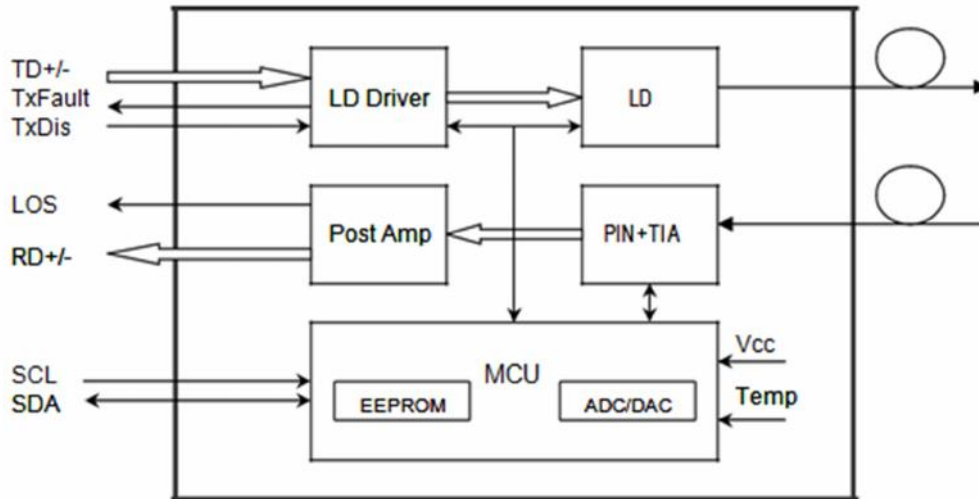
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The SFP transceivers are high performance modules supporting dual data-rate of 1.25Gbps/1.0625Gbps and 550mts transmission distance with MMF.

The transceiver consists of three sections: a FP laser transmitter, a PIN photodiode integrated with a trans-impedance preamplifier (TIA) and MCU control unit. All modules satisfy class I laser safety requirements.

The transceivers are compatible with SFP Multi-Source Agreement (MSA) and SFF-8472.



Absolute Maximum Ratings

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	Vcc	-0.5	4.5	V
Storage Temperature	TS	-40	+85	°C
Operating Humidity	-	5	85	%

Recommended Operating Conditions

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature	TC	0		+70	°C
Power Supply Voltage	Vcc	3.13	3.3	3.47	V
Power Supply Current	Icc			300	mA
Data Rate		1.063	1.25		Gbps

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Optical and Electrical Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	NOTES
Transmitter						
Centre Wavelength	λ_c	830	850	870	nm	
Spectral Width (RMS)	$\Delta\lambda$			4	nm	
Average Output Power	P_{out}	-9		0	dBm	1
Extinction Ratio	ER	9			dB	
Optical Rise/Fall Time (20%~80%)	tr/tf			0.26	ns	
Data Input Swing Differential	V_{in}	400		1800	MV	2
Input Differential Impedance	Z_n	90	100	110	Ω	
Tx Disable	Disable	2		V_{cc}	V	
Tx Fault	Enable	0		0.8	V	
Tx Disable	Fault	2		V_{cc}	V	
Tx Fault	Normal	0		0.8	V	
Receiver						
Centre Wavelength	λ_c	830	850	870	nm	
Receiver Sensitivity				-23	dBm	3
Receiver Overload		-3			dBm	3
LOS De-Assert	LOS_D			-24	dBm	
LOS Assert	LOS_A	-36				
LOS Hysteresis		1		4	dBm	
Data Output Swing Differential	V_{out}	370		1800	mV	4
LOS	High	2		V_{cc}	Ω	
	Low			0.8	V	

Notes:

1. The optical power is launched into MMF.
2. PECL input, internally AC-coupled and terminated.
3. Measured with a PRBS 2⁷-1 test pattern @1250Mbps, BER 1×10^{-12} .
4. Internally AC-coupled.

Diagnostics

Diagnostics Specification

Parameter	Range	Unit	Accuracy	Calibration
Temperature	0 to +70	°C	±3°C	Internal / External
Voltage	3.0 to 3.6	V	±3%	Internal / External
Bias Current	0 to 100	mA	±10%	Internal / External
TX Power	-9 to 0	dBm	±3dB	Internal / External
RX Power	-23 to -3	dBm	±3dB	Internal / External

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