Broadstick 10G SFP+ Transceivers SR 850nm 300mts for Dell

BS10GSFPDELSR

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

FormType	SFP+	**Max Distance**	300MTS
Wavelength	850nm	**Dom Support**	Yes
Interface	LC duplex	**Speed**	10Gbps
Tx Power	-9db to -0.5db	**Rx Sensitive**	-14db
Compatible	DELL	**TempRange**	0 to 70 ºC

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

www.broadstick.com

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 **BS10GSFPDELLR** to request a 10G SFP 1310nm 10Km for a DELL 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

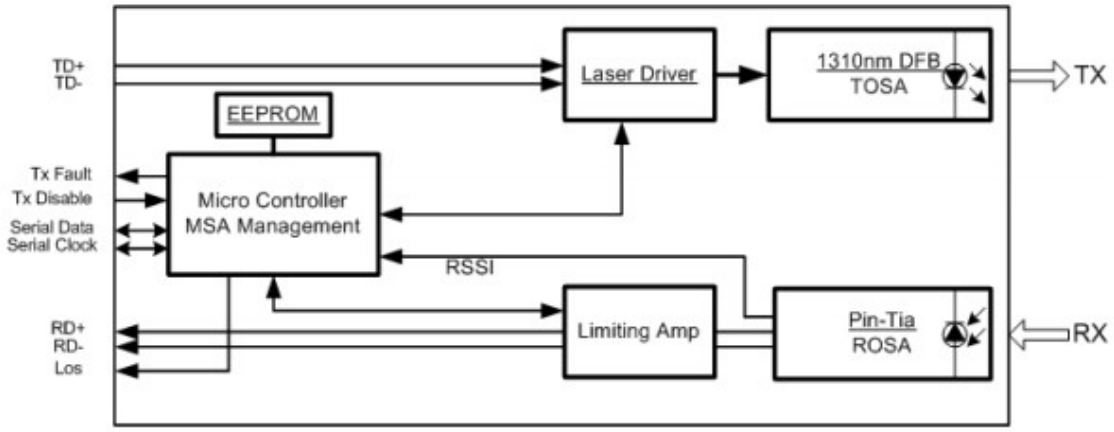
Distance	
SR	850nm 300mts
LR	1310nm 10Km
LR2	20Km
ER	40Km
ZR	80Km
ZR2	100Km
RJ	RJ45 100mts
Custom	XXX

For more information please contact sales@broadstick.com

www.broadstick.com

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	3.6	V
Storage Temperature	TS	-40	+85	°C
Operating Humidity	-	5	95	%

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

OPTICAL Characteristics

The following optical characteristics are defined over the Recommended Operating Environment unless otherwise specified.

Parameter	Unit	Values
Operating Reach	m	2 – 300m
Transmitter		
Center wavelength (range)	nm	830-870
Side Mode Suppression Ratio (min)	dB	30
Launched power		
– maximum (Average)	dBm	0.5
– minimum (Average)	dBm	-8.2
– OMA(min)	dBm	-5.2
– OMA-TDP (min)	dBm	-6.2
Transmitter and dispersion penalty (max)	dB	3.2
Average launch power of OFF transmitter (max)	dBm	-30
Extinction ratio (min)	dB	3.5
RIN12 OMA (max)	dB/Hz	-128
Optical Return Loss Tolerance (min)	dB	12
Receiver		
Center wavelength (range)	nm	830-870
Receive overload (max) in average power(note 1)	dBm	0.5
Receive sensitivity (min) in average power(note 1)	dBm	-14.4
Receiver sensitivity (max) in OMA (note 2)	dBm	-12.6
Receiver Reflectance (max)	dB	-12
Stressed receiver sensitivity (max) in OMA(note 2)	dBm	-10.3
Vertical eye closure penalty (min)(note 3)	dB	2.2
Los Assert(min)	dBm	-30
Los Dessert(max)	dBm	-12
Los Hysteresis(min)	dB	0.5
Stressed eye jitter (min)(note 2)	UIp-p	0.3
Receive electrical 3dB upper cutoff frequency (max)	Ghz	12.3
Receiver power (damage, Max)	dBm	1.5

Notes:

1. Average optical power shall be measured using the methods specified in TIA/EIA-455-95.

2. Receiver sensitivity is informative. Stressed receiver sensitivity shall be measured with conformance test signal for BER =1x 10-12 .

3. Vertical eye closure penalty and stressed eye jitter are the test conditions for measuring stressed receiver sensitivity. They are not the required characteristic of the receiver.

4. Power budget is defined as the different between the Rx sensitivity and the Tx output power of the interface.

5. Path penalty is intended as the power penalty of the interface between back-to-back and the maximum applied dispersion.

Electrical Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	NOTES
Data Rate		-	10.3125		Gbps	
Power Consumption			800	1000	mW	
Transmitter						
Single Ended Output Voltage Tolerance		-0.3	-	4	V	
C common mode voltage tolerance		15	-	-	mV	
Tx Input Diff Voltage	VI	90		350	mV	
Tx Fault	VoL	-0.3		0.4	V	At 0.7mA
Data Dependent Input Jitter	DDJ			0.1	UI	
Data Input Total Jitter	TJ			0.28	UI	
Receiver						
Single Ended Output Voltage Tolerance		-0.3	-	4	V	
Rx Output Diff Voltage Vo 150 425 mV	Vo	150		425	ps	
Rx Output Rise and Fall Time	Tr/Tf	30				20% to %80
Total Jitter	TJ			0.7	UI	
Deterministic Jitter	DJ			0.42	UI	