

# Broadstick Transceiver 40G QSFP+ TO 4X SFP+ 5mts

#### BS40GQSFP4SFP+CIS5

Broadstick provides Cisco compatible transceivers and active direct attach cables that meet the industry standards. All transceivers are **standards-based and comply** with the MSA.



## PARDADSTICK

Form Type	40G QSFP+ to 4 SFP+ 10G	Lenght	5mts
Cable Size	30awg	BER	Better Than 10-12
ROHS	Compliant	Voltage	3.3V, low power consumption
Compatible	Cisco	Temp Range	0 to 70 ºC

These devices 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 or active attach cable 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 <a href="mailto:sales@broadstick.com">sales@broadstick.com</a>

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.



Compliant

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature See Notes	Торс	0	-	70	degC
Relative Humidity (non-condensation)	RS	16 1920	7 <u>2</u> 0	85	%
Supply Voltage	VCC3	3.135	<mark>3.30</mark>	3.465	V
Differential Input Voltage Swing	V DIFF	100	C	1800	mVp-p
Differential Output Voltage Swing	V DIFF	25	0 8	600	mVp-p
Total Power Consumption	Pd	5 K	1.5		W
Data Output Rise Time/Fall Time	Tr,Tf			120	ps
Bit Error Ratio	BER		<10-12		1

### PARAMETERS

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**QSFP+ PINOUT** 



Viewed from Top

Bottom Side Viewed from Bottom

#### PERFORMANCE ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typical	Max	Unit	Notes
	т	ransmitte	r	ς		
Reference Differential Input Impedance	Zd		100		Ω	
Termination Mismatch	ΔZ M			5	%	
Input AC Common Mode Voltage			6	25	mV (RMS)	
	SDD11	< -12 + 2 × SQRT(f), with f in GHz.			dB	0.01-4.1GHz
Differential Input S- parameter	GDDTT	< -6.3 + 13 × log10(f/5.5), withf in G	, withf in GHz	dB	4.1-11.1GHz	
Reflected Differential to Common Mode Conversion	SCD11			-10	dB	0.01-11.1GHz
Total Jitter				0.40	UI	
Deterministic Jitter		8	0	0.15	UI	5

Receive					
Reference Differential Input Impedance	Zd	100		Ω	
Termination Mismatch	ΔZ M		5	%	

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Output AC Common Mode Voltage			15	mV (RMS)		
Differential Output	SDD22	< -12 + 2 × SQRT(1	dB	0.0 <mark>1</mark> -4.1GHz		
S- parameter		< -6.3 + 13 × log10(f/	5.5), with fin GHz	dB	4.1-11.1GHz	
Common Mode Output	SCC22	< -7 + 1.6 × f, with f in GHz.		dB	0.01-2.5GHz	
Reflection Coefficient	30022	50022		-3	dB	2.5-11.1GHz
Total Jitter			0.38	UI		
Deterministic Jitter	Se.	S)	0.64	UI	1	

#### **MECHANICAL SPECIFICATIONS**

Parameter	Minimum	Typical	Maximum	Unit
Cable Diameter (26AWG)		QSFP+: 0.413 SFP+: 0.197		Inches
Bend Radius (26AWG)	QSFP+ : 2.065 SFP+ :0.984			Inches
Cable Diameter (28 AWG)		QSFP+: 0.440 SFP+ : 0.185		Inches
Bend Radius (28 AWG)	QSFP+ : 2.204 SFP+ :0.925			Inches
Cable Diameter (30 AWG)		QSFP+: 0.323 SFP+ : 0.165		Inches
Bend Radius (30 AWG)	QSFP+ : 1.615 SFP+ :0.825			Inches
Within Pair Skew			100	ps/10n
Bulk Cable Time Delay		1 12	5.2	ns/m
Bulk Cable Impedance	95	100	105	Ohms
Insertion Force	1		QSFP+: 40 SFP+: 30	N
Withdrawal Force	1		QSFP+: 30 SFP+: 11	N
Retention Force	90		1	N
Durability	QSFP+: 250 SFP+ 50	1	1	Cycles

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