

# **TRANSCEIVER MASTER DATA SHEET**

## OVERVIEW

- Quantum Transceiver offer direct compatibility, high port density, high-performance, low power consumption, reliable with your existing switches and routers.
- These small, modular optical interface transceivers offer a convenient and cost-effective solution for an array of applications in the data center, campus, metropolitan-area access and ring network, storage area network, and long-haul network.
- Supporting various form factors, media types, and throughput, Quantum Network provides connectivity options to meet many different network architectures and deployment scenarios.
- The portfolios of Quantum Transceiver are fully compliant with industry standards.

### FEATURES

- Hot Pluggable
- Certified Quality and Compliance
- Cost-effective SFP solution
- High-performance
- Supports Digital Diagnostic Monitoring capability
- RoHS compliant (lead free)
- LC Duplex optical interface
- Low power consumption
- Operating case temperature:
  - Commercial: -5°C to +70°C
  - Industrial: -40~85°C

### BENEFITS

- Hot-swappable input/output gadget that plugs into a SFP port of a Quantum Networks Products. Whereas introducing or supplanting, no need to power down
- Fully compliant with industry standards.
- Warranty of three years.

## KEY STANDARDS AND FEATURES

Part codes	Speed	Form Factor	Fiber Type	IEEE Standards	Wavelength (nm)	Maximum Data Rate (Mbps) IEEE Standards codes	Maximum Cable Distance (mtrs) IEEE Standards codes
<b>100G Fiber</b>							
QN-UTQSP100-LR4	100G	QSFP28	Single-mode	802.3bm	1310	100000	10000
QN-UTQSP100-SR4	100G	QSFP28	Multi-mode	802.3bm	850	100000	100
QN-UTQSPI00-ER40	100G	QSFP28	Single-mode	802.3bm	1550	100000	40000
QN-UTQSPI00-ZR80	100G	QSFP28	Single-mode	802.3bm	1550	100000	80000
<b>40G Fiber</b>							
QN-UTSP40-LR4	40G	QSFP+ (QSFP)	Single-mode	802.3ba	1310	40000	10000
QN-UTSP40-SR4	40G	QSFP+ (QSFP)	Multi-mode	802.3ba	850	40000	100
QN-UTSP40-ER40	40G	QSFP+ (QSFP)	Single-mode	802.3ba	1550	100000	40000
QN-UTSP40-ZR80	40G	QSFP+ (QSFP)	Single-mode	802.3ba	1550	100000	80000
<b>25G FIBER</b>							
QN-UTSP28-LR	25G	SFP28 (Dual rate 10G/25G)	Single-mode	802.3by	1310	25000	10000
QN-UTSP28-SR	25G	SFP28 (Dual rate 10G/25G)	Multi-mode	802.3by	850	25000	100
QN-UTSP28-ER40	25G	SFP28 (Dual rate 10G/25G)	Single-mode	802.3by	1550	25000	40000
QN-UTSP28-ZR80	25G	SFP28 (Dual rate 10G/25G)	Single-mode	802.3by	1550	25000	80000
<b>10G BASE-T Copper</b>							
QN-UTSPP-10BT	10G	SFP+ (SFPP) Copper to RJ-45	-	802.3an	-	10000	100**
<b>10G Fiber</b>							
QN-UTSPP-LR	10G	SFP+ (SFPP)	Single-mode	802.3ae	1310	10000	10000
QN-UTSPP-LR-I	10G	SFP+ (SFPP)	Single-mode	802.3ae	1310	10000	10000
QN-UTSPP-SR	10G	SFP+ (SFPP)	Multi-mode	802.3ae	850	10000	300
QN-UTSPP-SR-I	10G	SFP+ (SFPP)	Multi-mode	802.3ae	850	10000	300
QN-UTSPP-ER40	10G	SFP+ (SFPP)	Single-mode	802.3ae	1550	10000	40000
QN-UTSPP-ZR80	10G	SFP+ (SFPP)	Single-mode	802.3ae	1550	10000	80000
<b>1000 BASE-T Copper</b>							
QN-UTSFP-1BT	1G	SFP Copper to RJ-45	-	802.3ab	-	1000	100
<b>1G Fiber</b>							
QN-UTSFP-LX	1G	SFP	Single-mode	802.3z	1310	1000	10000
QN-UTSFP-LX-I	1G	SFP	Single mode	802.3z	1310	1000	10000
QN-UTSFP-SX	1G	SFP	Multi-mode	802.3z	850	1000	500
QN-UTSFP-SX-I	1G	SFP	Multi-mode	802.3z	850	1000	500
QN-UTSFP-LX-BXD*	1G	SFP	Single-mode	802.3z	1490nm-TX /1310nm-RX	1000	10000
QN-UTSFP-LX-BXU*	1G	SFP	Single-mode	802.3z	1310nm-TX /1490nm-RX	1000	10000
QN-UTSFP-ER40	1G	SFP	Single-mode	802.3	1310	1250	40000
QN-UTSFP-ZR80	1G	SFP	Single mode	802.3	1550	1250	80000
QN-UTSFP-EZX	1G	SFP	Single mode	802.3	1550	1250	150000

\*It's a bi-directional SFP Transceiver.

\*\* It's for cat6a and cat 7.

## ORDERING INFORMATION

Part Code	Description
<b>Commercial Grade</b>	
<b>100G Fiber</b>	
QN-UTQSPI00-LR4	Quantum Networks 100G QSFP28, 1310nm, LC, LR4, SMF, 10km, -5~70°C, Commercial Grade
QN-UTQSPI00-SR4	Quantum Networks 100G QSFP28, 850nm, MPO, SR4, MMF, 100m, -5~70°C, Commercial Grade
QN-UTQSPI00-ER40	Quantum Networks 100G QSFP28, 1550nm, LC, ER, SMF, 40km, -5~70°C, Commercial Grade
QN-UTQSPI00-ZR80	Quantum Networks 100G QSFP28, 1550nm, LC, ZR, SMF, 80km, -5~70°C, Commercial Grade
<b>40G Fiber</b>	
QN-UTSP40-LR4	Quantum Networks 40G QSFP (QSFP+), 1310nm, LC, LR4, SMF, 10km, -5~70°C, Commercial Grade
QN-UTSP40-SR4	Quantum Networks 40G QSFP (QSFP+), 850nm, MPO, SR4, MMF, 100m, -5~70°C, Commercial Grade
QN-UTSP40-ER40	Quantum Networks 40G QSFP (QSFP+), 1550nm, LC, ER, SMF, 40km, -5~70°C, Commercial Grade
QN-UTSP40-ZR80	Quantum Networks 40G QSFP (QSFP+), 1550nm, LC, ZR, SMF, 80km, -5~70°C, Commercial Grade
<b>25G FIBER</b>	
QN-UTSP28-LR	Quantum Networks 25G SFP28, 1310nm, LC, LR, SMF, 10km, -5~70°C, Commercial Grade
QN-UTSP28-SR	Quantum Networks 25G SFP28, 850nm, LC, SR, MMF, 100m, -5~70°C, Commercial Grade
QN-UTSP28-ER40	Quantum Networks 25G SFP28, 1550nm, LC, ER, SMF, 40km, -5~70°C, Commercial Grade
QN-UTSP28-ZR80	Quantum Networks 25G SFP28, 1550nm, LC, ZR, SMF, 80km, -5~70°C, Commercial Grade
<b>10G BASE-T Copper</b>	
QN-UTSPP-10BT	Quantum Networks 10G Copper, 10GBase-T, RJ-45, UTP, 100**m, -5~70°C
<b>10G Fiber</b>	
QN-UTSPP-LR	Quantum Networks 10G SFPP (SFP+), 1310nm, LC, LR, SMF, 10km, -5~70°C, without CDR
QN-UTSPP-SR	Quantum Networks 10G SFPP (SFP+), 850nm, LC, SR, MMF, 300m, -5~70°C, without CDR
QN-UTSPP-ER40	Quantum Networks 10G SFPP (SFP+), 1550nm, LC, ER, SMF, 40km, -5~70°C, Commercial Grade
QN-UTSPP-ZR80	Quantum Networks 10G SFPP (SFP+), 1550nm, LC, ZR, SMF, 80km, -5~70°C, Commercial Grade
<b>1000 BASE-T Copper</b>	
QN-UTSFP-1BT	Quantum Networks 1G Copper SFP, 1000Base-T Default, RJ-45, UTP, 100m, -5~70°C
<b>1G Fiber</b>	
QN-UTSFP-LX	Quantum Networks 1G SFP, 1310nm, LC, LX, SMF, 10km, -5~70°C, Commercial Grade
QN-UTSFP-SX	Quantum Networks 1G SFP, 850nm, LC, SX, MMF, 500m, -5~70°C, Commercial Grade
QN-UTSFP-LX-BXD	Quantum Networks 1G SFP, 1490nm-TX/1310nm-RX, LC, LX, SMF, 10km, -5~70°C, Commercial Grade
QN-UTSFP-LX-BXU	Quantum Networks 1G SFP, 1310nm-TX/1490nm-RX, LC, LX, SMF, 10km, -5~70°C, Commercial Grade
QN-UTSFP-ER40	Quantum Networks 1G SFP (SFP), 1310nm, LC, EX, SMF, 40km, -5~70°C, Commercial Grade
QN-UTSFP-ZR80	Quantum Networks 1G SFP (SFP), 1550nm, LC, ZX, SMF, 80km, -5~70°C, Commercial Grade
QN-UTSFP-EZX	Quantum Networks 1G SFP, 1550nm, LC, SMF, 150km, -5~70°C, Commercial Grade
<b>Industrial Grade</b>	
<b>10G Fiber</b>	
QN-UTSPP-LR-I	Quantum Networks 10G SFPP (SFP+), 1310nm, LC, LR, SMF, 10km, -40~85°C, Industrial Grade
QN-UTSPP-SR-I	Quantum Networks 10G SFPP (SFP+), 850nm, LC, SR, MMF, 300m, -40~85°C, Industrial Grade
<b>1G Fiber</b>	
QN-UTSFP-LX-I	Quantum Networks 1G SFP, 1310nm, LC, LX, SMF, 10km, -40~85°C, Industrial Grade
QN-UTSFP-SX-I	Quantum Networks 1G SFP, 850nm, LC, SX, MMF, 500m, -40~85°C, Industrial Grade

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