

# QSFP 40 Gigabit Series

## 40 Gigabit Small Form-Factor Pluggable Modules

The Allied Telesis QSFP Series offers the latest industry-standard connectivity in a flexible, small form factor. These hot-swappable transceiver modules simply plug into any compatible Allied Telesis product.



### Options

Allied Telesis QSFP Series Gigabit Small Form-Factor Pluggables (SFPs) are supported on all Allied Telesis devices with SFP uplink connections.

The hot-swappable feature of the QSFP Series allows for network changes without removal or reconfiguration of costly network equipment.

### Applications

The QSFP Series supports 40GbE and high-density 10GbE interconnects. They are ideal for Datacom/Telecom switch and router connections, as well as data aggregation, backplane, proprietary protocol and high-density applications.

### Interoperability

The Allied Telesis QSFP Series is fully compliant with industry-standard networking regulations. This allows Allied Telesis QSFP modules to be used on any networking equipment which complies with industry standards.

### Key Features

- ▶ Compliant with 40GbE Specification IEEE 802.3ba
- ▶ Compliant with industry-standard SFF-8436
- ▶ Compact size
- ▶ Flexible architecture
- ▶ High port density
- ▶ Hot-swappable
- ▶ RoHS compliant (SR4), RoHS-6 compliant (LR4)
- ▶ Supports Digital Diagnostics Monitoring (DDM)
- ▶ MSA compliant
- ▶ 4 CWDM lanes MUX/DEMUX design on LR4 and ER4

### Technical Specifications

PRODUCT	FIBER TYPE	CONNECTOR TYPE	MAXIMUM DISTANCE	WAVELENGTH (nm)	DDM*	TRANSMIT (dBm)		RECEIVE SENSITIVITY (dBm)	POWER BUDGET (dBm)	OVERLOAD (dBm)	OPERATING TEMPERATURE
						MIN	MAX				
QSFPSR4	MMF	MPO-12	100 m on OM3 fiber 150 m on OM4 fiber	850	Yes	-8	2	-11	3	3	0°C to 70°C (32°F to 158°F)
QSFPSR4LC	MMF	LC	100 m on OM3 fiber 150 m on OM4 fiber	850	Yes	-4	5	-11	7	0.5	0°C to 70°C (32°F to 158°F)
QSFPLR4	SMF	LC	2 m to 10 km	1271 nm** 1291 nm** 1311 nm** 1331 nm**	Yes	-7	2	-11	4	3	0°C to 70°C (32°F to 158°F)
QSFPER4	SMF	LC	40 km	1271 nm** 1291 nm** 1311 nm** 1331 nm**	Yes	-3	5	-19	16	0.5	0°C to 70°C (32°F to 158°F)

\*Digital Diagnostics Monitoring

\*\* Central wavelengths of the 4 CWDM channels

## QSFP Series | 40 Gigabit Small Form-Factor Pluggables

### Power Consumption

Power consumption: QSFP SR4: <1.5W  
QSFP LR4: <3.5W  
QSFP SR4RLC: <1.5W  
QSFP ER4: <3.5W

### Environmental

Operating temperature 0°C to 70°C (32°F to 158°F)  
Storage temperature  
QSFP SR4: -40°C to 85°C (-40°F to 185°F)  
QSFP LR4: -20°C to 85°C (-4°F to 185°F)  
QSFP SR4RLC: -40°C to 85°C (-40°F to 185°F)  
QSFP ER4: -20°C to 85°C (-4°F to 185°F)  
Relative humidity 0 to 85% non-condensing

### Ordering Information

#### QSFP Modules

##### AT-QSFP SR4

40G, QSFP SR4, MMF, MPO-12

##### AT-QSFP SR4LC

40G QSFP SR4, MMF, LC

##### AT-QSFP LR4

40G, QSFP LR4 (10 km), CWDM, LC

##### AT-QSFP ER4

40G, QSFP, ER4 (40 km), CWDM, LC

#### Accessories: Optical Cables

##### AT-MTP12-1

MTP Cable for AT-QSFP SR4 only, length 1 m

##### AT-MTP12-5

MTP Cable for AT-QSFP SR4 only, length 5 m