

SPIO Series

10Gigabit Small Form-Factor Pluggable Modules

The Allied Telesis SP10 Series offers a wide variety of 10 Gigabit Ethernet connectivity options for data center, enterprise and service provider transport applications. These industry-standard hot-swappable devices plug into an Ethernet SFP+ port in any compatible Allied Telesis product. Configurations can be optimized to meet a variety of distance and service requirements.

Compatibility

SP10 Series SFP+ modules are compatible with all Allied Telesis products that support SFP+ uplink connections.

Options

The SP10 Series offers short- and long-haul solutions. From the inexpensive Allied Telesis AT-SP10SR to the far-reaching Allied Telesis AT-SP10ZR80/I, the network can be extended to the distances that meet any performance need.

Interoperability

Allied Telesis Small Form Pluggables Plus (SFP+) fully comply with industrystandard networking regulations. This compliance allows Allied Telesis SFP+ modules to be used on any networking equipment which complies with industry standards.

Applications

The Allied Telesis 10G Long Reach Multimode (LRM) optic is designed to transmit and receive optical data over a legacy OM1 multi-mode fiber link up to 220m, ideal for high-speed storage area networks, computer cluster crossconnect and custom high-speed data pipes. The extended temperature opticsoffer a wide operating temperature range of -40C to 85C allowing deployment in the harshest industrial environments.

Key Features

- ▶ 10Gbps data rate
- Compact size
- Flexible architecture
- ▶ Hot-swappable
- ▶ RoHS compliant
- ► Compliant to SFP+ Electrical MSA SFF-8431
- ▶ Compliant to SFF-8472 MSA
- ▶ Lower power consumption
- ▶ Digital diagnostics monitoring (DDM)
- ► Maximum data rate of 10.3Gbps

Specifications

MODEL	FIBER TYPE	MAXIMUM DISTANCE	WAVELENGTH	TRANSMIT		RECEIVE
				MIN	MAX	SENSITIVITY
AT-SP10SR	MMF	300 m	850 nm	-7 dBm	-1 dBm	-11.2 dBm
AT-SP10SR/I	MMF	Up to 300 m	850 nm	-5 dBm	-1 dBm	-9.9 dBm
AT-SP10LR	SMF	Up to 10 km	1310 nm	-8.2 dBm	0.5 dBm	-12.6 dBm
AT-SP10LR/I	SMF	Up to 10 km	1310 nm	-8.2 dBm	0.5 dBm	-14.4 dBm
AT-SP10LRM	MMF	Up to 220 m	1310 nm	-8.2 dBm	0.5 dBm	-6.0 dBm
AT-SP10LR20/I	SMF	Up to 20 km	1310 nm	-1 dBm	-	-13.5 dBm
AT-SP10ER40/I	SMF	Up to 40 km	1550 nm	-4.7 dBm	4 dBm	-14.1 dBm
AT-SP10ZR80/I	SMF	Up to 80 km	1550 nm	0 dBm	5 dBm	-20 dBm

Connector type: LC Power consumption: <1W

Environmental for Industrial temperature optics:

Operating temperature: -40°C to 85°C (-40°F to 185°F)
Storage temperature: -40°C to 85°C (-40°F to 185°F)
Relative humidity: 0 to 85% non-condensing

Environmental for Commercial temperature optics:

Operating temperature: 0°C to 70°C (32°F to 158°F)
Storage temperature: -40°C to 85°C (-40°F to 185°F)
Relative humidity: 0 to 80% non-condensing

Ordering Information

Commercial Temperature AT-SP10SR

10GBASE-SR, 850 nm, MMF

AT-SP10LR

10GBASE-LR, 1310 nm, 10 km with SMF

AT-SP10LRM

10GBASE-LRM, 1310 nm FP, MMF

Industrial Temperature AT-SP10SR/I

 $10 GBASE\text{-}SR,\,850 nm,\,MMF,\,I\text{-}Temp$

AT-SP10LR/I

10GBASE-LR, 1310 nm, 10 km with SMF, I-Temp

AT-SP10LR20/I

10GBASE-LR, 1310 nm, 20k m with SMF, I-Temp

AT-SP10ER40/I

10GBASE-ER, 1550 nm, 40 km with SMF, I-Temp

AT-SP10ZR80/I

10GBASE-ZR, 1550 nm, 80 km with SMF, I-Temp

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