

# SP10 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 industry-standard 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 cross-connect and custom high-speed data pipes. The extended temperature optic offer a wide operating temperature range of -40°C to 85°C 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 SENSITIVITY
				MIN	MAX	
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**  
10GBASE-SR, 850nm, MMF, I-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