SP10 Series
10 Gigabit 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 simply plug into the Ethernet SFP+ port on all SFP+-compatible devices. Configuration can be optimized to meet a wide variety of distance and service requirements.

Compatibility
Allied Telesis SP10 Series 10 Gigabit SFP+ modules are supported on all Allied Telesis devices with SFP+ uplink connections.

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

Interoperability
The SP10 Series SFP+ modules fully comply with industry-standard networking regulations. This allows the SP10 Series to be used with any networking equipment which complies with industry standards.

BiDi transceivers
Using an SFP BiDi transceiver can upgrade transmission capacity on a typical network—without installing new fibers—by utilizing a single fiber for both the send and receive signals.

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. This makes it ideal for high-speed storage area networks, computer cluster cross-connect and custom high-speed data pipes. The extended temperature optics offer a wide operating temperature range of -40°C to 85°C, allowing deployment in even the harshest industrial environments.

Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FIBER TYPE</th>
<th>CONNECTOR TYPE</th>
<th>MAXIMUM DISTANCE</th>
<th>WAVELENGTH Tx/Rx (nm)</th>
<th>DDM*</th>
<th>TRANSMIT (dBm)</th>
<th>RECEIVE SENSITIV-ITY (dBm)</th>
<th>Power Budget (dBm)</th>
<th>OVERLOAD (dBm)</th>
<th>OPERATING TEMPERATURE</th>
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</thead>
<tbody>
<tr>
<td>SP10T</td>
<td>100/1G/10G</td>
<td>RJ45</td>
<td>Cat 6a/7 - 20 m</td>
<td>-</td>
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<td>-3°C to 85°C (23°F to 185°F)</td>
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<td>SP10SR</td>
<td>MMF</td>
<td>LC</td>
<td>OM1 - 33 m</td>
<td>850</td>
<td>Yes</td>
<td>-7</td>
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<td>SP10SR/I</td>
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<td>LC</td>
<td>OM2 - 62 m, OM3 - 300 m, OM4 - 470 m</td>
<td>850</td>
<td>Yes</td>
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<td>-10</td>
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<tr>
<td>SP10L</td>
<td>SMF</td>
<td>LC</td>
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<td>LC</td>
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<td>Up to 80 km</td>
<td>1550</td>
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<td>LC</td>
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<td>1330/1270</td>
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<td>1330/1270</td>
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</table>

Power consumption: <1W

*Digital Diagnostics Monitoring

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 < 1 Watt
- Digital diagnostics monitoring (DDM)
- Maximum data rate of 10.3Gbps
- BiDi options available
Environmental Specifications for Commercial Temperature Optics:
- Operating temperature: 0°C to 70°C (32°F to 158°F)
- SP10T: -5°C to 85°C (23°F to 185°F)
- Storage temperature: -40°C to 85°C (-40°F to 185°F)
- Relative humidity: 0 to 80% non-condensing

Environmental Specifications 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

Ordering Information

**Commercial Temperature**
- **AT-SP10T**
  10G/1000/10000T, 20 m, CAT6a/7
- **AT-SP10SR**
  10BASE-SR, 850 nm, MMF, TAA*
- **AT-SP10LR**
  10BASE-LR, 1310 nm, 10 km with SMF
- **AT-SP10LRM**
  10BASE-LRM, 1310 nm FP, MMF

**Industrial Temperature**
- **AT-SP10SR/I**
  10BASE-SR, 850 nm, MMF, I-Temp, TAA*
- **AT-SP10LR/I**
  10BASE-LR, 1310 nm, 10 km with SMF, I-Temp
- **AT-SP10ER40/I**
  10BASE-ER, 1550 nm, 40 km with SMF, I-Temp
- **AT-SP10ZR80/I**
  10BASE-ZR, 1550 nm, 80 km with SMF, I-Temp

*TAA = Trade Act Agreement Compliant