



## SP Series

### Small Form Pluggable (SFP) Modules

#### AT-SPTX

100m 10/100/1000T SFP

#### AT-SPSX

500m 1000SX SFP

#### AT-SPBD10-13

10km bi-directional 1000LX SFP

#### AT-SPBD10-14

10km bi-directional SFP

#### AT-SPLX10

10km 1000LX SFP

#### AT-SPLX40

40km 1000LX SFP

#### AT-SPLX40/1550

40km 1000LX SFP

#### AT-SPZX80

80km 1000LX SFP

#### AT-SPZX80/xxxx

80km 1000LX SFP, CWDM

#### AT-SP2670SR

2km multi-rate SFP

#### AT-SP2670IR

15km multi-rate SFP

#### Industry Standard

The AT-SP series offers the latest industry standard in flexible, full-duplex Gigabit Ethernet connectivity. These hot swappable, fiber interfaces simply plug into a SFP slot on Allied Telesis' SFP compatible products. Configurations can be optimized to meet varied distance and service requirements.

#### Options

The AT-SP series offers short-haul and long-haul solutions. From the inexpensive AT-SPSX to the far-reaching AT-SPZX80, you have the option to extend to the distances that meet your performance needs. The CWDM version allows you to take advantage of the CWDM technology in an existing network infrastructure, maximizing fiber efficiency. Multi-rate versions allow technologies other than just Gigabit Ethernet to be transmitted over single-mode fiber.

#### Product Compatibility

The AT-SP series SFPs are compatible with all the Allied Telesis range of products supporting SFP uplink connections.

#### Key Features

- Copper and fiber solutions
- Connect up to 80km
- Compact size
- Flexible architecture
- Plug & Play ease-of-use
- Self-locking mechanism
- 'Colored' wavelength for CWDM use
- Data: support for fiber channel and 2x fiber channel
- Telecom: support for OC3/STM-1, OC12/STM-4, and OC48/STM-16
- Two year warranty

#### Ordering Information

##### AT-SPTX

100m 10/100/1000T (RJ-45) SFP

##### AT-SPSX

500m 1000SX SFP, 50 Micron MMF (850nm)  
220m 1000SX SFP, 62.5 Micron MMF (850nm)

##### AT-SPBD10-13

10km Bi-directional 1000LX SFP, 9 Micron SMF (1310Tx/1490Rx)

##### AT-SPBD10-14

10km Bi-directional 1000LX SFP, 9 Micron SMF (1490Tx/1310Rx)

##### AT-SPLX10

10km 1000LX SFP, 9 Micron SMF (1310nm)

##### AT-SPLX40

40km 1000LX SFP, 9 Micron SMF (1310nm)

##### AT-SPLX40/1550

40km 1000LX SFP, 9 Micron SMF (1550nm)

##### AT-SPZX80

80km 1000ZX SFP, 9 Micron SMF (1550nm)

##### AT-SPZX80/xxxx

80km 1000ZX SFP, 9 Micron SMF (xxxxnm)

##### AT-SP2670/SR

2km SFP, 9 Micron SMF (1310nm), Multi-rate

##### AT-SP2670/IR

15km SFP, 9 Micron SMF, (1310nm), Multi-rate

Where xxxx = CWDM Wavelength  
(1610nm, 1590nm, 1570nm, 1550nm, 1530nm, 1510nm, 1490nm, 1470nm)

# SP Series | Small Form Pluggable (SFP) Modules

## Specifications

| Model             | Media Type | Wavelength    | Transmit |              |          | Receive  |         |          | Distance |
|-------------------|------------|---------------|----------|--------------|----------|----------|---------|----------|----------|
|                   |            |               | Min (dB) | Typical (dB) | Max (dB) | Min (dB) | Typical | Max (dB) |          |
| AT-SPSX           | MMF        | 850nm         | -9.5     |              | ±3.5     | -20      |         | -3       | 500m     |
| AT-SPLX10         | SMF        | 1310nm        | -9.5     |              | -3       | -22      |         | -3       | 10km     |
| AT-SPBD10-13      | SMF        | 1310Tx/1490Rx | -9       | -6           | -3       | -3       | -3      | -20      | 10km     |
| AT-SPBD10-14      | SMF        | 1490Tx/1310Rx | -9       | -6           | -3       | -3       | -3      | -20      | 10km     |
| AT-SPLX40         | SMF        | 1310nm        | 0        |              | 5        | -22      |         | 0        | 40km     |
| AT-SPLX40-1550    | SMF        | 1550nm        | -5       |              | 0        | -24      | -26     | -3       | 40km     |
| AT-SPZX80         | SMF        | 1550nm        | 0        |              | 5        | -22      |         | -3       | 80km     |
| AT-SPZX80/CWDM    | SMF        | 1310-1610nm   | 0        |              | 5        | -24      |         | -3       | 80km     |
| AT-SPTX           | Cat 5 UTP  | N/A           |          |              |          |          |         |          | 100m     |
| <b>Multi-rate</b> |            |               |          |              |          |          |         |          |          |
| AT-SP2670/SR      | SMF        | 1310nm        | -9.5     |              | -3       | -18      |         | 0        | 2km      |
| AT-SP2670/IR      | SMF        | 1310nm        | -5       |              | 0        | -18      |         | 0        | 15km     |

## Standard Data Rates Supported

| Model             | Optical Gigabit Ethernet | 1 x Fiber Channel | 2 x Fiber Channel | OC-3/STM-1 | OC-12/STM-4 | OC-48/STM-16 | 1000T |
|-------------------|--------------------------|-------------------|-------------------|------------|-------------|--------------|-------|
| AT-SPSX           | ✓                        | ✓                 | ✓                 |            |             |              |       |
| AT-SPLX10         | ✓                        | ✓                 | ✓                 |            |             |              |       |
| AT-SPLX40         | ✓                        | ✓                 | ✓                 |            |             |              |       |
| AT-SPLX40-1550    | ✓                        |                   |                   |            |             |              |       |
| AT-SPZX80         | ✓                        | ✓                 | ✓                 |            |             |              |       |
| AT-SPZX80/CWDM    | ✓                        |                   |                   |            |             |              |       |
| AT-SPTX           | ✓                        |                   |                   |            |             |              | ✓     |
| <b>Multi-rate</b> |                          |                   |                   |            |             |              |       |
| AT-SP2670/SR      | ✓                        | ✓                 | ✓                 | ■          | ■           | ✓            |       |
| AT-SP2670/IR      | ✓                        | ✓                 | ✓                 | ■          | ■           | ✓            |       |

| Model             | Media Type | Wavelength                                             | Max. Data Rate | Operating Temp °C | Distance |
|-------------------|------------|--------------------------------------------------------|----------------|-------------------|----------|
| AT-SPSX           | MMF        | 850nm                                                  | 2.125Gbps      | -20 to 90         | 500m     |
| AT-SPLX10         | SMF        | 1310nm                                                 | 2.125Gbps      | -40 to 85         | 10km     |
| AT-SPLX40         | SMF        | 1310nm                                                 | 2.125Gbps      | -10 to 70         | 40km     |
| AT-SPLX40-1550    | SMF        | 1550nm                                                 | 1.25Gbps       | -5 to 70          | 40km     |
| AT-SPZX80         | SMF        | 1550nm                                                 | 2.125Gbps      | -10 to 70         | 80km     |
| AT-SPZX80/CWDM    | SMF        | 1310, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610nm | 1.25Gbps       | -5 to 70          | 80km     |
| AT-SPTX           | Copper     | N/A                                                    | 1.25Gbps       | 0 to 85           | 100m     |
| <b>Multi-rate</b> |            |                                                        |                |                   |          |
| AT-SP2670/SR      | SMF        | 1310nm                                                 | 2.670Gbps      | -40 to 85         | 2km      |
| AT-SP2670/IR      | SMF        | 1310nm                                                 | 2.670Gbps      | -10 to 70         | 15km     |

✓ = Compliant    ■ = Compatible

USA Headquarters | 19800 North Creek Parkway | Suite 200 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895  
 European Headquarters | Via Motta 24 | 6830 Chiasso | Switzerland | T: +41 91 69769.00 | F: +41 91 69769.11  
 Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830

[www.alliedtelesis.com](http://www.alliedtelesis.com)

© 2007 Allied Telesis Inc. All rights reserved. Information in this document is subject to change without notice. All company names, logos, and product designs that are trademarks or registered trademarks are the property of their respective owners.

617-00618 Rev I