

# SP Series

## Gigabit Small Form-Factor Pluggable Modules

The Allied Telesis SP Series delivers flexible, full-duplex Ethernet connectivity. These hot-swappable fiber interfaces simply plug into the SFP slot on all SFP-compatible devices. Configuration can be optimized to meet a wide variety of distance and service requirements.



### Compatibility

SP Series Small Form Pluggables (SFPs) are supported on all Allied Telesis devices that support SFP uplink connections.

The Allied Telesis SP Series SFPs are Multi-Sourcing Agreement (MSA) compliant. They fully comply with industry standard networking regulations. This compliance allows the Allied Telesis SFPs to be used with other MSA-compliant platforms that support SFP uplink connections.

For Cisco compatibility please refer to the 'SFP Compatibility Flyer'.

### Options

The Allied Telesis SPSX Series offers short haul, long haul and Bi-Directional (BiDi) solutions. This flexibility allows a network manager to extend the distance and bandwidth of their network.

Using an SFP Bi-Directional transceiver can upgrade transmission capacity on a typical network without installing new fibers by utilizing a single fiber for both the send/receive signals.

## Key Features

- ▶ Fiber solution
- ▶ Compact size
- ▶ Flexible architecture
- ▶ Plug-and-play for ease of use
- ▶ Self-locking mechanism
- ▶ MSA compliant
- ▶ Two year warranty\*

\*Warranties may be region specific. For local warranty periods, please visit [alliedtelesis.com/support](http://alliedtelesis.com/support) or contact your local sales office.

## Specifications

### Standard Gigabit SFP's

MODEL	FIBER TYPE	CONNECTOR TYPE	MAXIMUM DISTANCE	WAVELENGTH (nm)	DDM*	TRANSMIT (dBm)		RECEIVE SENSITIVITY (dBm)	Power Budget (dBm)	OVERLOAD	TEMPERATURE
						MIN	MAX				
SPTX	10/100/1000T	RJ45	100 m	-	-	-	-	-	-	-	0°C to 70°C (32°F to 158°F)
SPTX-90	10/100/1000T	RJ45	100 m	-	-	-	-	-	-	-	0°C to 70°C (32°F to 158°F)
SPTX/I	10/100/1000T	RJ45	100 m	-	-	-	-	-	-	-	-40°C to 85°C (-40°F to 185°F)
SPEX	MMF	LC	2 km	1310	-	-9	-1	-19	10	-3	0°C to 70°C (32°F to 158°F)
SPSX	MMF	LC	220-550 m	850	-	-9.5	-3	-17	7.5	-3	0°C to 70°C (32°F to 158°F)
SPSX-90	MMF	LC	220-550 m	850	-	-8	-3	-19	11	-3	0°C to 70°C (32°F to 158°F)
SPSX/I	MMF	LC	220-550 m	850	Yes	-9.5	-4	-17	7.5	-3	-40°C to 85°C (-40°F to 185°F)
SPLX10	SMF	LC	10 km	1310	-	-9	-3	-20	11	-3	0°C to 70°C (32°F to 158°F)
SPLX10/I	SMF	LC	10 km	1310	Yes	-9	-3	-19	10	-3	-40°C to 85°C (-40°F to 185°F)
SPLX40	SMF	LC	40 km	1310	Yes	-4	1	-23	19	-1	0°C to 70°C (32°F to 158°F)
SPZX80	SMF	LC	80 km	1310	Yes	0	5	-24	24	-1	0°C to 70°C (32°F to 158°F)

\*Digital Diagnostics Monitoring

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### Bidi SFP's

MODEL	FIBER TYPE	CONNECTOR TYPE	MAXIMUM DISTANCE	WAVELENGTH (nm)	DDM*	TRANSMIT (dBm)		RECEIVE SENSITIVITY (dBm)	Power Budget (dBm)	OVERLOAD	TEMPERATURE
						MIN	MAX				
SPBD10-13	SMF	LC	10km	1310 /1490	Yes	-9	-3	-20	11	-3	-40°C to 85°C (-40°F to 185°F)
SPBD10-14	SMF	LC	10km	1490/1310	Yes	-9	-3	-20	11	-3	-40°C to 85°C (-40°F to 185°F)
SPBD20-13/I	SMF	SC	20km	1310 /1490	-	-9	-3	-23	14	-3	-40°C to 95°C (-40°F to 203°F)
SPBD20-14/I	SMF	SC	20km	1490/1310	-	-9	-3	-23	14	-3	-40°C to 95°C (-40°F to 203°F)
SPBD20LC/I-13	SMF	LC	20km	1310/1490	Yes	-5	0	-20	15	0	-40°C to 85°C (-40°F to 185°F)
SPBD20LC/I-14	SMF	LC	20km	1490/1310	Yes	-5	0	-20	15	0	-40°C to 85°C (-40°F to 185°F)
SPBD20-14-EXT	SMF	SC	20km	1490/1310	Yes	2	7	-29	31	-1	-40°C to 85°C (-40°F to 185°F)
SPBD20EPON-13/I	SMF	SC	20km	1310/1490	Yes	-9	-1	-2	1	-1	-30°C to 85°C (-22°F to 185°F)
SPBD20DUAL-14	SMF	LC	20km	1490/1310	Yes	-8	-3	-23	15	-3	-40°C to 85°C (-40°F to 185°F)
SPBD40DUAL-14	SMF	LC	40km	1490/1310	Yes	-3	2	-23	20	-3	-40°C to 85°C (-40°F to 185°F)
SPBD40-13/I	SMF	LC	40km	1310/1490	Yes	-3	2	-23	20	-3	-40°C to 85°C (-40°F to 185°F)
SPBD40-14/I	SMF	LC	40km	1490/1310	Yes	-3	2	-23	20	-3	-40°C to 85°C (-40°F to 185°F)

\*Digital Diagnostics Monitoring

### Ordering Information

#### AT-SPSX

1000SX SFP, LC, MMF, 850 nm

#### AT-SPSX-90

1000SX SFP, LC, MMF, 850 nm, TAA Compliant

#### AT-SPSX/I

1000SX SFP, LC, MMF, 850 nm, I-Temp

#### AT-SPEX

1000EX SFP, LC, MMF, 1310 nm, TAA Compliant

#### AT-SPLX10

1000LX SFP, LC, SMF, 1310 nm (10 km)

#### AT-SPLX10/I

1000LX SFP, LC, SMF, 1310 nm, (10 km), I-Temp

#### AT-SPLX40

1000LX SFP, LC, SMF, 1310 nm, (40 km)

#### AT-SPZX80

1000ZX SFP, LC, SMF, 1550 nm, (80 km)

#### AT-SPTX

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

#### AT-SPTX-90

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

#### AT-SPTX/I

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

#### AT-SPBD10-13

10km, 1G, SMF, BiDi, LC (1310Tx/1490Rx)

#### AT-SPBD10-14

10km, 1G, SMF, BiDi, LC (1490Tx/1310Rx)

#### AT-SPBD20-13/I

20km, 1G, SMF, BiDi, SC (1310Tx/1490Rx)

#### AT-SPBD20-14/I

20km, 1G, SMF, BiDi, SC (1490Tx/1310Rx)

#### AT-SPBD20LC/I-13

20km, 1G, SMF, BiDi, LC, TAA Compliant (1310Tx/1490Rx)

#### AT-SPBD20LC/I-14

20km, 1G, SMF, BiDi, LC, TAA Compliant (1490Tx/1310Rx)

#### AT-SPBD20-14-EXT

20km, 1G, SMF, BiDi, SC (1310Tx/1490Rx)

#### AT-SPBD20EPON-13/I

20 km, 1G, EPON. SMF, BiDi, LC (1310Tx, 1490Rx)

#### AT-SPBD20DUAL-14

20 km, 2x1G, CSFP, SMF, BiDi, LC (1490Tx/1310Rx)

#### AT-SPBD40DUAL-14

40 km, 2x1G, CSFP, SMF, BiDi, LC (1490Tx/1310Rx)

#### AT-SPBD40-13/I

40 km, 1G, SMF, BiDi, LC, TAA Compliant (1310Tx/1490Rx)

#### AT-SPBD40-14/I

40 km, 1 G, SMF, BiDi, LC, TAA Compliant (1490Tx/1310Rx)

