

# AT-SPSX/SC AT-SPFX/SC

# 1Gb and 100FX Ethernet Transceivers with an SC connector

The AT-SPSX/SC and SPFX/SC are "first of their kind" optics, allowing the SFP to use an SC fiber connector. This unique feature allows many current networks that use SC fiber terminations, to connect to any device (for example, media converters, switches etc.) that have an available SFP port, without the need to change to LC connectors.



## **Product Overview**

These SC Small Form Factor Pluggable (SFP) transceiver modules are designed for high performance integrated duplex data links over multimode optical fiber.

The high-speed VCSEL laser diode and photo diode are provided as a light source and a detector, respectively. An EEPROM contains product information for the host equipment, and is accessed by the 2- wire serial CMOS EEPROM protocol.

The AT-SPSX/SC and AT-SPFX/SC comply with SONET/SDH standards, class 1 laser products, EN60825, and EN60950, and support SFP hot plug functionality.

#### **Specifications**

#### **Features**

- ► RoHS compliant
- ▶ Duplex SC multi-mode transceiver
- ► Single +3.3 V power supply
- ▶ Complies with IEEE 802.3z Gigabit Ethernet
- ► TAA (Trade Act Agreement) Compliant
- ▶ Operating temperature: 0°C ~ 70°C
- ▶ SFP MSA compliant
- ► Supports digital diagnostic functionality
- ► Support EEPROM write protection, 0x50 read only, 0x51 read only, 0x56 N/A

#### **Applications**

- ▶ Gigabit Ethernet
- ▶ Fast Ethermet

#### **Environmental Compliance**

- ▶ Compliant to EU-RoHS, WEEE and China RoHS
- ► Drop & vibration test

#### Safety

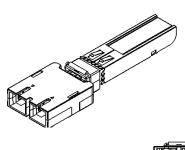
- ▶ cTUVs
  - ▶ UL 62368-1
  - ► CSA C22.2 No. 62368-1
- ► TUV
  - ► EN 62368-1
  - ► EN 60825-1
- ► FDA

#### **EMS/EMI**

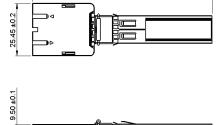
- ▶ FCC
  - ▶ 47 CFR FCC rules and regulations Part 15 Subpart B class B digital device
- ▶ CE
  - ► EN 55032
  - ► EN 55035
- ▶ RCM
  - ▶ AS/NZS CISPR 32 class

## **Product Specifications**

| Model   | Fiber<br>Type | Connector<br>Type | Max<br>Distance | Wavelength<br>Tx/Rx nm | DDM | Transmit dBm |     | Receive<br>Sensitivity | Power<br>Budget | Overload | Operating                   |
|---------|---------------|-------------------|-----------------|------------------------|-----|--------------|-----|------------------------|-----------------|----------|-----------------------------|
|         |               |                   |                 |                        |     | Min          | Max | (dBm)                  | (dB)            | (dBm)    | Temperature                 |
| SPSX/SC | MMF           | SC                | 220-550 m       | 850                    | Yes | -9           | -4  | -17                    | 8               | 3        | 0°C to 70°C (32°F to 158°F) |
| SPFX/SC | MMF           | SC                | 2 km            | 1310                   | Yes | -15          | -8  | -30                    | 15              | -3       | 0°C to 70°C (32°F to 158°F) |







## **Ordering Information**

AT-SPSX/SC

1Gb Ethernet 850nm SC, TAA1

AT-SPFX/SC

100mb Ethernet 1310nm SC, TAA1

<sup>1</sup> Trade Act Agreement compliant

