Allied Telesis™

PC200/2000 Series

PoE+ Switching Media Converters

PC2000
10/100/1000T POE+ to 1000MB Fiber speed/media converter

PC200
10/100TX POE+ to 100MB Fiber speed/media converter

Powering Remote Devices

Allied Telesis PC200x PoE+ Series switches are the ideal solution for powering remote devices such as IP phones, video cameras, wireless access points, etc., which are more than 100m from a Power over Ethernet switch.

The PC2000/SP features a 100MB or 1000MB SFP port and a 10/100/1000T twisted-pair port. Allied Telesis offers a wide variety of SFPs featuring multimode, single mode and BiDi optics.

The fixed fiber-optic port PC200x models features an SC connector for 100FX and 1000SX or LC connector for the 1000SX, capable of operating at a distance of up to two kilometers over multi-mode fiber. The twisted-pair port has an RJ-45 connector with a maximum operating distance of 100 meters. In addition to transmitting data, the twisted-pair port also injects power down the cable, allowing a remote PoE+ Powered Device to operate without the need of any additional power source. All PoE+ Devices (IEEE802.3at compliant) are supported, as the PC200x PoE+ Series can deliver a full 30W of power to the remote device.

Remote Power Cycle

The PC200x series offers feature where when the fiber port is dropped the TX PoE+ port will cycle power. It allows a remote administrator to login in a switch and disable the switch port in which the PC200x series is attached and will have the remote PoE+ device to lose power. This can be useful when an administrator needs to reset a remote device without actually physical going to the location.

VLAN Support

Many backbone switch products support the industry-standard IEEE 802.1Q specification for Virtual LANs (VLANs) that sends extra-long data packets on the network. PC200x PoE+ Series switches are fully compatible with these long packets, enabling them to be used in modern networks. Switches not supporting this feature will discard these extra-long packets, making them unsuitable for modern networks.

Small and Flexible

The small size and internal power supply of the PC200x PoE+ Series allows them to be used almost anywhere.

Smart MissingLink™ (SML)

The Smart MissingLink (SML) feature monitors network connections and provides notification when network segments fail, allowing network managers to quickly identify the source and location of failed segments and minimize downtime.

Key Features

- ▶ Convert speed as well as media type
- ▶ IEEE 802.3at Power over Ethernet (POE+) compliant
- ▶ Supplies up to 30W of PoE+ power
- ▶ Support 100 and 1000Mbps fiber SFP modules (AT-PC2000/SP)
- ▶ Auto MDI/MDI-X
- ▶ Smart Missing Link ((SML)
- ▶ Supports jumbo frames, up to 10K bytes
- ▶ Support for multi-mode fiber
- ▶ 4K MAC address tables
- ▶ Store-and-forward switching mode
- ▶ Transparent to IEEE 802.1Q packets
- ▶ Standalone or wall mountable
- ▶ Internal AC power supply
- ▶ AC power cord retaining clip

10/100/1000T Twisted Pair Port LEDs

The LEDs for the 10/100/1000T twisted pair port are described below.

LED	COLOR	DESCRIPTION
Left LED	Green	The port has established a link to a network device.
	Blinking Green	Activity.
	Off	The port has not established a link to a network device.
PoE Power	Green	The twisted pair port is connected to a powered device and is providing power to the device.
	Off	The twisted pair port is not supplying power to the network device connected to the port.
Fault	Red	The PoE port is operational.

DIP Switch

FUNCTION	POSITION	DESCRIPTION
SML	Off	Turned Off.
100FD	Off	Auto Negotiate.
	On	Forced 100-FD on copper.
Remote PoE+ Control	Off	Turned off.
	On	PoE power is forced off when fiber link goes down.

Fiber Port LEDs

LED	COLOR	DESCRIPTION
LINK	Green	The port has established a link to a network device.
	Blinking Green	Activity.
	Off	The port has not established a link with a network device.

Operational Characteristics

MAC address table 1k addresses

Forwarding/ filtering rate	1,488,000pps for 1Gbps 148,880pps for 100Mbps 14,880pps for 10Mbps
Latency	14.31sec (64 byte packet, 100Mbps full-duplex)
Maximum packet	10,000 bytes size

Optical Characterisitcs

Wavelength	1310nm (PC200) 850nm (PC2000)
Fiber cable	50/125um (OM2) or 62.5/125um (OM1) MMF
SFP	See specific SFP, SMF datasheet at www.alliedtelesis.com

Output Power

PC200	Min -19dBm Max -14 dBm
PC2000	Min -9.5dBm Max -4 dBm

Receive Power

PC200	Min -32dBm Max -3 dBm
PC2000	Min -17dBm Max -3 dBm

Power Characteristics

Input voltage	(auto-ranging)
Internal power supply	100-120V AC/60Hz, 220-240V AC/50Hz
Power consumption	35W

Power over Ethernet

Opertating mode	IEEE 802.3at Mode A
Maximum power	30W

Environmental Specifications

Operating temperature	0ºC to 50ºC (32°F to 104°F)
Storage temperature	-25ºC to 70ºC (-13°F to 158°F)
Operating altitude	Up to 3,048 m (10k ft)
Relative humidity	5% to 95% (non-condensing)

Physical Characteristics

Dimensions (W x D x H)	15.5 cm x 14.9 cm x 4 cm (6.1 in x 5.16 in x 1.58 in)
Weight:	0.748 kg (1.65 lb)

Electrical/Mechanical Approvals

FCC Class B
EN55022 Class A
C-Tick
CE compliant

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Ordering Information

AT-PC2000/SC-xx
10/100/1000T POE+ to 1000SX/SC

AT-PC2000/SP-xx
10/100/1000T POE+ to SFP (100MB or 1000MB)

AT-PC2000/LC-xx
10/100/1000T POE+ to 1000SX/LC

AT-PC200/SC-xx
10/100/1000T POE+ to 100FX/SC

Where xx = 60 for AC power supply, multi-region (US,UK, AU, EU)
90 for AC power supply, US power cord, FED

Accessories
Small Form Pluggables (SFPs)

AT-SPSX
Multi-mode Fiber, GbE SFP

AT-SPSX /I
Multi-mode Fiber, GbE SFP, I-Temp

AT-SPL X10
Single-mode Fiber, 10km, GbE SFP

AT-SPL X10/I
Single-mode Fiber, 10km, GbE SFP, I-Temp

AT-SPL X40
Single-mode Fiber, 40km, GbE SFP

AT-SPBD10-13
10KM Bi-Directional GbE SMF SFP

AT-SPBD10-14
10KM Bi-Directional GbE SMF SFP

AT-SPTX
100/1000T SFP

AT-SPFX/2
Multi-mode Fiber, 2km, 100FX, SFP

AT-SPFX/15
Single-mode Fiber, 15km, 100FX, SFP

AT-SPFX/40
Single-mode Fiber, 40km, 100FX, SFP

AT-SPBD20-13/I*
1000BX GbE Bi-Di (1310 nm Tx, 1550 nm Rx) fiber up to 20 km

AT-SPBD20-14/I*
1000BX GbE Bi-Di (1490 nm Tx, 1310 nm Rx) fiber up to 20 km

* For MMC2000/SP