Technical Specifications

Maximum Operating Temperature:	0° C to 40° C (32° F to 104° F)
Maximum Storage Temperature:	-20° C to 80° C (-4° F to 176° F)
Operating Altitude:	Up to 3,048 meters (10,000 feet)
Humidity:	5% to 80% (non-condensing)
EMC:	FCC Class A, EN55022 Class A, EN55024
Safety:	EN60825, EN60950, UL 1950 (UL/cUL)

Electrical Safety and Emission Statement

Standards: This product meets the following standards.

U.S. Federal Communications Commission
RADIATED ENERGY Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Note: Modifications or changes not expressly approved of by the manufacturer or the FCC, can void your right to operate this equipment.

Industry Canada
This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

	RFI Emission	EN55022 Class A
⚠️	**Warning**: In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.	
	Immunity	EN55024
	Electrical Safety	EN60950, UL 1950
⚠️	**Laser**	EN60825

AT-PB10 Series
Fast Ethernet Media Converters

Quick Install Guide

For use with the PowerBlade Chassis

Overview

The AT-PB10 Series Fast Ethernet Media Converters are hot swappable modules designed for the PowerBlade Chassis. These media converters extend the distance of your network by interconnecting twisted pair cabling and fiber optic cabling or twisted pair cabling and thinnet cabling. Each media converter (except for the AT-PB15) features a 10Base-T twisted pair port and a 10Base-F fiber optic port. The twisted pair port has an RJ-45 connector and a maximum operating distance of 100 meters (328 feet). The fiber optic port has an ST or SC connector and a maximum operating distance of 2 kilometers (1.2 miles). These units operate at 10 Mbps and feature full-duplex operation.

The AT-PB15 features a 10Base-T twisted pair port and a 10Base2 thinnet port. The twisted pair port has an RJ-45 connector and a maximum operating distance of 100 meters (328 feet). The thinnet port has a BNC-type connector and a maximum operating distance of 185 meters (606 feet). The AT-PB15 operates at 10 Mbps and features half-duplex operation only.

Related Documents

This quick install guide is an abbreviated version of the installation procedure. For complete details on the features, functions and installation instructions, refer to the *PowerBlade Chassis Installation Guide.* This guide is available from Allied Telesyn's web site at www.alliedtelesyn.com.

Cable Specifications

The following table lists the cable specifications for the 10Base-T twisted pair port on all AT-PB10 series modules.

Connector	Type of Twisted Pair Cable	Maximum Operating Distance
RJ-45	Unshielded/Shielded Twisted Pair Category 3 or better	100 m (328 ft)

The second port on the AT-PB15 has a BNC connector with a maximum operating distance of 185 meters (606 feet). The following table lists the cable specifications for the 10Base-F fiber optic port on the AT-PB13 and AT-PB14 when operating in full-duplex mode.

Model	Connector	Type of Fiber Optic Cable	Maximum Operating Distance
AT-PB13	ST	50/125 µm or 62.5/125 µm multimode	2 km (1.2 mi)
AT-PB14	SC	50/125 µm or 62.5/125 µm multimode	2 km (1.2 mi)

Cable specifications for half-duplex operation can be found in the *PowerBlade Chassis Installation Guide*.

Package Contents

Make sure the following items are included in your package. If any item is missing or damaged, contact your Allied Telesyn sales representative for assistance.

❑ One AT-PB10 Series Media Converter Module

❑ This quick install guide

❑ Warranty card

Installing the Media Converter

1. Remove a blank faceplate from an empty expansion slot on the front of the chassis. The module can be installed in any expansion slot.

2. Remove the module from the shipping package and store the packaging material in a safe place. Be sure to observe standard ESD precautions.

3. For an AT-PB15 module, check the setting of the J5 jumper. If the chassis does not contain an AT-PBM02 management module, set the jumper to the disabled position. Refer to the *PowerBlade Chassis Installation Guide* for the jumper location.

4. Slide the module into the expansion slot, aligning it with the guiderails until it firmly connects to the chassis' backplane.

5. Secure the module to the chassis by tightening the thumbscrew.

6. Verify that the PR LED on the front of the unit is green.

7. Set the LT/ML switch to the ML (MissingLink) position (AT-PB13 or AT-PB14 only).

8. Set the MDI/MDI-X switch for the 10Base-T port to the appropriate setting.

9. Connect the data cables.

10. The AT-PB10 series module is now ready for use. Repeat this procedure to install additional AT-PB10 series modules.

Refer to the *PowerBlade Chassis Installation Guide* for additional information.

Status LEDs

LED	Color	Description
System LEDs		
PR	Green	Power is applied to the media converter.
ML	Green	The MissingLink feature is activated.
	OFF	The MissingLink feature is disabled and the unit is performing a link test.
Port LEDs		
LK	Green	A link is established on the port.
RX	Green	Data is being received or transmitted by the port.

Fiber Optic Interface (Multimode)

Receiver	Typical	Range
Sensitivity	-30 dBm	N/A
Saturation	170 µW (-7.6 dBm)	150 µW (-8.2 dBm)
Transmitter		
Wavelength	830 nm	± 20 nm
Output Power	**Typical**	**Worst**
62.5/125 mM	-12 dBm	-15.0
50/125 mM	-16.5 dBm	-19.5 dBm