General Installation

Safety

Caution: This equipment is intended to be used in a restricted access area and should only be worked on by qualified service personal.

- Use the system in a protected environment only.
- Never install telephone wiring during a lightning storm.
- Follow the installation instructions carefully. The current limiting feature in this product could be rendered inoperable if the product is improperly installed.

Other Considerations

- Do not install this device in an environment where the operating temperature exceeds 0°C to 40°C (32 to 104°F).
- Do not install this device where the relative humidity exceeds 95%, non-condensing.
- Do not store this device in an environment where temperatures exceeds 0°C to 31°C (32 to 117°F).

Chassis Installation and Grounding

APC recommends that the ProtectNET® Data Line Surge Protection chassis (Figure 1) be installed in a rack or enclosure provided with the chassis. Additionally, the chassis must be connected to a proper protective earth ground. A ground stud is provided on the back of the chassis. Secure the mounting rack or enclosure grounding lug is connected to a proper ground. Install the chassis and modules as shown in the illustration below.

Module Installation

The system chassis is designed to accommodate up to 24 data line modules. To install a module, remove one of the blank panels by pulling it straight out from the chassis. Align the module with the groove in the chassis, and slide the module fully into the chassis.

Cable Installation

To install a data line cable, connect the signal RJ-45 connector to the signal source and then to the upper connector on the module. Connect a data line cable from the lower connector on the module to the equipment to be protected. Note: To accommodate 24 modules, the four-wide center blank panel must be removed.

Model Information

Model PNET5 (Network Protection)

The PNET5 module will protect the port of a Network Interface Card, hub or other local area network (LAN) equipment from damage caused by lightning-generated electrical transients. This module provides surge protection for 10Base-T, 10Base-TX, 100Base-TX, 100VG or Token Ring Type 3 UTP port (RJ-45), and TCP applications. PNET5 complies with applicable ISO/IEC Standard 8802-3 (IEEE 802.3) or 8802-5 (IEEE 802.5) requirements.

In applications where the network data transmission rate is high, insertion loss introduced by intrabuild devices becomes a significant consideration where cable lengths are particularly long. At the 100 Mbps data transmission rate, there is a small insertion loss introduced by the PNET5. Use Table 1 to approximate the insertion loss based on cable type and length. The current limiting feature in the PNET5 by installed cable Category level or type. The ISO/IEC 8802-3 standard specifies a maximum UTP cable length of 100 meters per segment at 10/100 Mbps. For Thinnet, the maximum cable length is 185 meters (607 feet).

Model P232R (RS232 Protection)

The P232R module is for use with RS232 communication equipment (RS232 multiports, asynchronous multiplexers, asynchronous printer spoolers, etc.) comprised of shieldless, twisted-pair wiring with RJ-45 connectors. It protects up to four ports per unit.

Model PDIGTR (Digital Telephone Protection)

The PDIGTR module is only for use in T1, CSU, DSU, ISDN, DDS and Digital Leased Line telecommunication equipment, TVN-1 or SELV circuits only.

Service

If the device arrived damaged, notify the carrier.

If the device requires service, do not return it to the dealer. The following steps should be taken:

1. Go to http://www.apc.com/support/
2. Have the model number, serial number and date of purchase available. Be prepared to troubleshoot the problem with an APC Technical Support representative. If this is not successful, APC will issue a Return Merchandise Authorization (RMA) number and a shipping address.

Limited Lifetime Warranty

APC warrants its products to be free from defects in materials and workmanship under normal use and service for the lifetime of the original purchaser. This obligation under this warranty is limited to repairing or replacing, at its sole option, any such defective products. To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from APC or an APC Service Center. Product must be returned to APC or an APC Service Center with transportation charges prepaid and must be accompanied by a brief description of the problem and date of purchase.

This warranty applies only to the original purchaser.

Customer Service / Technical Support

For information please call APC Customer Service Center at:
American Power Conversion 1-401-789-5735 or 1-800-800-4APC (4272)
132 Fairgrounds Road
West Kingston, RI 02892 USA
esupport@apc.com

Model Information

Model: P232R (RS232 Protection)

This module is intended for RS232 communications equipment in applications where the communications equipment is attached to a local transmission network. The module provides a high degree of protection for the communications equipment from damage caused by lightning-generated electrical transients.

Federal Communications Commission (FCC) Notice

This equipment contains an FCC compliant RJ-45 modular jack, which is designed to be connected to the telephone network or premises wiring using compatible modular plugs and jacks which comply with the requirements of FCC Part 68 rules. The Ringer Equivalence Number (REN) is used to determine the number of devices which may be connected to the telephone line. An excessive REN may cause the equipment to not ring in response to an incoming call. In most areas, the sum of RENs of all equipment on a line must not exceed five (5).

In the unlikely event that this equipment causes harm to the telephone network, the telephone company will notify you in advance of any such documentation, but if advance notice is not practical, it may disconnect the service first and notify you as soon as possible. If the device is disconnected due to unauthorized usage, you will be liable for all of your rights in the service to be restored.

From time to time, the telephone company may make changes in its facilities, equipment, or operations which could affect the operation of connected equipment. If this occurs, the telephone company is required to provide you with advance notice so you can make the modifications necessary to maintain uninterrupted service. This product is not serviceable by the user.

Security

This product is intended for use in a restricted access area and should only be worked on by qualified service personnel. Read and save these instructions and observe the following safety precautions:

- Never install telephone wiring during a lightning storm.
- Follow the installation instructions carefully. The current limiting feature in this product could be rendered inoperable if the product is improperly installed.

Warning: Disconnect module wires before removing any module. Do not put fingers or any object inside the chassis.

Model PTE2LR (Analogue Telephone Protection)

The PTE2LR module protects analog telephones, ADSL, ISDN2, voice mail and automated answering systems, fax machines and systems from damage caused by lightning-generated electrical transients. Each PTE2LR protects up to 2 lines.

Service

If the device arrived damaged, notify the carrier.

If the device requires service, do not return it to the dealer. The following steps should be taken:

1. Go to http://www.apc.com/support/
2. Have the model number, serial number and date of purchase available. Be prepared to troubleshoot the problem with an APC Technical Support representative. If this is not successful, APC will issue a Return Merchandise Authorization (RMA) number and a shipping address.

Limited Lifetime Warranty

APC warrants its products to be free from defects in materials and workmanship under normal use and service for the lifetime of the original purchaser. This obligation under this warranty is limited to repairing or replacing, at its sole option, any such defective products. To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from APC or an APC Service Center. Product must be returned to APC or an APC Service Center with transportation charges prepaid and must be accompanied by a brief description of the problem and date of purchase.

This warranty applies only to the original purchaser.

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132 Fairgrounds Road
West Kingston, RI 01892 USA
esupport@apc.com

Federal Communications Commission (FCC) Notice

This equipment contains an FCC compliant RJ-45 modular jack, which is designed to be connected to the telephone network or premises wiring using compatible modular plugs and jacks which comply with the requirements of FCC Part 68 rules. The Ringer Equivalence Number (REN) is used to determine the number of devices which may be connected to the telephone line. An excessive REN may cause the equipment to not ring in response to an incoming call. In most areas, the sum of RENs of all equipment on a line must not exceed five (5).

In the unlikely event that this equipment causes harm to the telephone network, the telephone company will notify you in advance of any such documentation, but if advance notice is not practical, it may disconnect the service first and notify you as soon as possible. If the device is disconnected due to unauthorized usage, you will be liable for all of your rights in the service to be restored.

From time to time, the telephone company may make changes in its facilities, equipment, or operations which could affect the operation of connected equipment. If this occurs, the telephone company is required to provide you with advance notice so you can make the modifications necessary to maintain uninterrupted service. This product is not serviceable by the user.