APC®

by Schneider Electric

Installing Multiple Management Cards

Overview

When installing more than one APC management card, you must install the cards in the order described in this document because they share a serial link with the connected UPS. Installing the cards in any other order may result in failure for them to operate properly.

Before you start

The following table identifies the priority of the management cards you will be installing. Management cards that have more control over the UPS have higher priority.

- Level 6: Exerts total control
- Level 5: Exerts wide, but not total, control
- Level 4: Exerts limited control
- Level 3: Passes commands to the UPS
- Level 2: Exerts no control
- Level 1: Exerts no control and must be installed closest to the UPS

Management Card	Priority
Network Management Card[1] (AP9617, AP9618, AP9619, AP9630, AP9631)	Level 6
Out-of-Band Management Card (AP9608)	Level 5
Relay I/O Module (AP9610)	Level 4
Interface Expander Card (AP9607)	Level 3
Building Management Integration Card[2] (AP9622)	Level 2
Environmental Monitoring Card (AP9612TH)	Level 1
1. Attach no more than two Network Management Cards to a UPS. 2. Attach only one Building Management Integration Card to a UPS.	

Two models of expansion chassis

If you need management card slots in addition to those in your UPS, use one or more expansion chassis available from APC.

Chassis	Compatible UPSs
Expansion Chassis (AP9600), one slot	APC UPSs that are not installed in a rack or enclosure.
Triple Expansion Chassis (AP9604BLK), three slots	All APC UPSs

Installing cards in an expansion chassis

Install the lowest-priority cards in any available card slots in the UPS, and then use an expansion chassis for remaining higher-priority cards. In a Triple Expansion Chassis:

- Install each card, starting with the lowest priority (see "Before you start" on page 1) in the lowest-numbered slot.
- If you are installing a Network Management Card, install it in slot 3, even if you are leaving another slot empty.

Installing cards in expansion chassis set up serially

If you have increased your management card capacity by connecting multiple expansion chassis serially (in a cascading setup), install the Network Management Card in the highest-numbered slot, and the Out-of-Band Management Card in the second-highest-numbered slot of the chassis installed farthest from the UPS.

⚠ **Warning: Do not attach more than two Network Management Cards or one Building Management Integration Card to a UPS.**
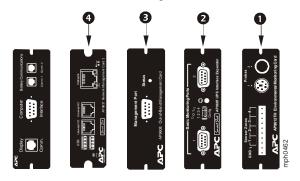
If the Network Management Card is pre-installed in the UPS, refer instead to "When a management card has been pre-installed" on page 4.
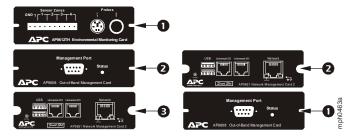
Installing cards in a Symmetra UPS

If you are installing a Network Management Card without an attached expansion chassis, install that card in the highest numbered slot, even if you are leaving other slots empty. If you are using an expansion chassis, see "Installing cards in an expansion chassis" on page 2.

For Symmetra models with 4, 3, or 2 slots, install each card, starting with the lowest priority (as listed in the table on page 1) in the lowest numbered slot. Use the following illustrations to determine model-specific slot numbering.

- When 4 slots are available, arranged in a horizontal row, the lowest-numbered slot is at the right.

- When slots are arranged in a vertical column:
  - If 3 slots are available, the lowest-numbered slot is at the top (as shown in the following illustration).
  - If 2 slots are available, the lowest-numbered slot is at the bottom (as shown in the following illustration).

When a management card has been pre-installed

For Symmetra UPS models that are shipped with a Network Management Card already installed (such as Symmetra RM models), the UPS itself may have only one remaining card slot available. Referring to the table on page 1, install the lowest priority card in the UPS and use one or more expansion chassis for any other cards, as described beginning on page 2. To use an Out-of-Band Management Card, install it in the highest-numbered slot of the expansion chassis farthest from the UPS.