

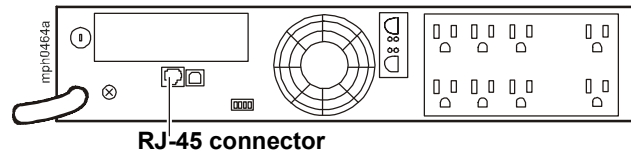


by Schneider Electric

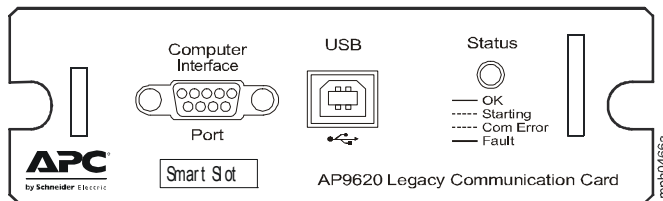
Legacy Communications SmartSlot™ Card (AP9620) — Installation and Start-up Guide



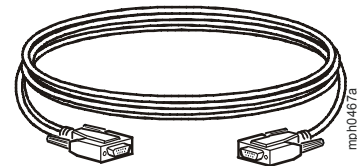
Warning: The Legacy Communications SmartSlot Card must only be used in a UPS that has an RJ-45 connector used for serial communications. These units also have plastic tabs extending from the SmartSlot.



Contents of Package



Legacy Communications SmartSlot Card



Serial Cable



Note: For USB operation, use the USB cable supplied with the UPS or a standard USB 2.0 compliant A-B cable.

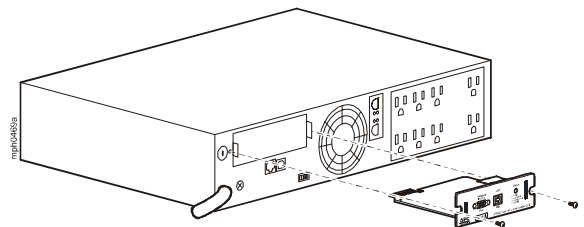
Note: Connecting accessories to the Computer Interface Port is not supported.

Installing the card in the UPS



Note: You can install the card while the UPS is turned on. Both screws must be reinstalled in order to ensure proper operation of the card.

1. Remove the two screws holding the cover on the SmartSlot with a #2 Phillips-head screwdriver.
2. Orient the card with the card guides and slide it in. If the tabs on the housing do not match the slots on the card, the card is not compatible with the UPS.
3. Reinstall both screws removed in step 1.



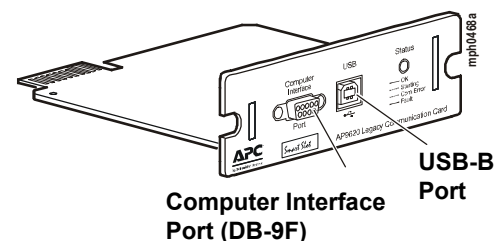
Card status indicators

Solid Green	The card is operating correctly.
Flashing Green	The card is initializing. After a few seconds it should turn solid green.
Solid Red	The card is incompatible with this UPS. Check apc.com for a firmware update.
Flashing Red	The card has a fault. Call APC technical support.

Connecting the communication cable

You must choose to use either the USB or the Computer Interface Port. Only one can be functional at a time.

Note: The communication interfaces on the UPS are disabled when the card is installed.



UPS Operations with SmartSlot card. The table documents how UPS devices operate with the card.

Types of Interface UPS: UPS operational issue
Simple: Simple Signal interface via DB-9F Smart Serial: DB-9F smart signaling interface
USB: USB-B port on the card.

	INTER-FACE	COMMAND OR FUNCTION	HISTORIC OPERATION	OPERATION WITH LEGACY COMMUNICATIONS SMARTSLOT CARD INSTALLED
1	Simple	Remote On	Not always supported. Some UPS devices allowed starting with the Remote On signal when AC utility power was off.	Remote On is enabled when AC utility power is on OR when AC power has been off for less than 10 minutes.
2	UPS	On button operation	UPS turned on immediately.	UPS turns on after the configured Turn on Delay. The default setting is "0" (zero) - immediately turn on.
3	UPS	Switched Outlets	Were not supported.	Where relevant, switched outlet operation is disabled: all the UPS outlets function simultaneously. (The Main Outlet Group <i>might</i> turn on slightly before, and turn off slightly after, the other outlets). Switched outlet-related LCD menu screens are not accessible.
4	UPS	RJ-45 comms port	Was not supported.	Disabled.
5	UPS	USB comms port	Differed, depending on setup.	Disabled.
6	UPS	Self-test Operation	Could always be initiated.	1. A self-test is enabled on extended-run UPS devices with more than 8 hours runtime. 2. A UPS might prevent a self-test if the battery charge is < 70%.
7	UPS	Runtime Calibration	A runtime calibration could be initiated, regardless of load and battery charge.	Two conditions must be met: 1. The battery charge must be 100%. 2. The load must be => 10% of the UPS rating.
8	Smart Serial	Test lights and beeper	The UPS beeped for 1.5 seconds	Beep operation is determined by the UPS; some newer UPS devices have a 5 second beep.
9	Smart Serial	Simulate Power Failure	The UPS operated momentarily on battery.	The UPS does not go to battery operation, but temporarily remembers this command (in order to enable the Shutdown on Battery command).
10	Smart Serial	Establishment of Communications	Serial communications had to be re-established each time the UPS turns on.	No change.
11	Smart Serial	Minimum battery capacity to restart	After a complete discharge of batteries in an outage, the UPS restarted when the battery charge reached this value.	The UPS reads the value as a %, and restarts as follows: 0%—an immediate restart; 15%—with runtime of 90 secs.; 30%—with runtime of 180 secs.; up to a maximum 90%—restarts with runtime of 240 secs.
12	Smart Serial	Battery Replacement Date	Any 8 characters were supported.	The date format must be mm-dd-yy, with any separating character ("-" here) supported. Dates prior to the UPS manufacture date are not accepted.
13	Smart Serial	Alarm delay after line fail	On some UPS devices you could set the beeper to sound after being on battery for 30 secs, or at low battery. All UPS devices could mute and disable the beeper.	UPS devices can enable, disable or mute the alarm. If beeping at low battery or on battery is selected, the alarm is disabled, but the setting is displayed on the LCD screen.
14	Smart Serial/USB	UPS Model	Returned the device name, e.g. Smart-UPS 750VA	Returns the closest equivalent historical name, which might be different from the name displayed on the LCD screen.
15	Smart Serial	Nominal Battery Voltage	Reported the nominal battery voltage of the UPS.	The nominal battery voltage is not known so the card "estimates" it and returns 024, 048, or 192; if an estimate is impossible, the card reports 024.
16	Smart Serial	Upper Transfer Voltage		For SURTD UPS devices, the card displays the corresponding bypass limit; but the allowable range of values is determined by the voltage setting of the UPS.
17	Smart Serial	Lower Transfer Voltage		
18	USB	DelayBeforeReboot	The Turn Off Delay setting was applied before turning the UPS off, the UPS remained off for the time specified, and was then turned back on immediately.	The Turn Off Delay setting is applied before the UPS is turned off, the UPS remains off for the time specified, and the Turn On Delay is applied before the UPS is turned back on.
19	USB	USB communication	Not present on SURTD UPS devices.	Not functional when installed in a SURTD UPS device.

Customer support and warranty information is available at the APC Web site, www.apc.com.

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