

InRow® CW—ACRC301S, ACRC301H Series

For details on upgrading the InRow CW air conditioner firmware, see the *InRow CW Online Guide*, available from the InRow CW product page of the Schneider Electric Web site, www.schneider-electric.com or www.apc.com.

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1.0 Affected Revision Levels

apc_hw06_aos_650.bin

Network Management Card Operating System & TCP/IP Stack

apc_hw05_acrc2g_622.bin

ACRC2G Application for InRow RC Air Conditioners

powernet426.mib or later

PowerNet SNMP Management Information Base (MIB)

2.0 OS & TCP/IP Stack Modifications (apc_hw06_aos_650.bin)

2.1 Compatibility

apc_hw06_acrc2g_622.bin

InRow RC Application for ACRC300 Series

2.2 Known Issues in This Version

1. The NMC Upgrade utility supports ASCII characters only for username and password.
2. Non-ASCII characters conveyed to an ISX Manager will not display properly in ISXM.
3. The following fields do not accept UTF-8 characters (they accept ASCII only):
 - Any numeric field (only Arabic numbers are accepted)
 - The Datalog FTP Server name
4. The following warning events do NOT cause the Network Management Card to send an SNMP trap:
 - System: Detected an unauthorized user attempting to access the FTP interface
 - System: Password Changed
5. In the Web interface, the Primary and Secondary RADIUS servers accept invalid IP address values.
6. In the Config.ini: the SystemDateTime Server keys return strange values when long strings are applied.
7. There are different Date Formats on the NMC General/About page.
8. The Config.ini keywords "LinkDisplay" and "LinkName" in the [SystemLinks] section accept a NULL value.
9. The Trap receiver NMS settings incorrectly allow for a NULL entry.
10. The SNMP v1 and v3 Community Access Addresses incorrectly allow for a NULL entry.
11. The SNMP v1 Trap Community Name incorrectly accepts values greater than the max of 15 and NULL.
12. The Syslog Server address incorrectly accepts a NULL entry.
13. Various phrase translations are missing or incorrect.

2.3 New Features and Enhancements

1. Addition of Boot Monitor version in essential SNMP table.
2. Network stack upgrade supporting enhanced secure mail (TLS 1.1/1.2).

2.4 Bugs Fixed in This Version

1. Fixed slow network response.
2. Fixed Network Management Card memory leaks that caused reboot if SNMPv3 traps are enabled and at least one active alarm is present.
3. Fixed various Data Center Expert communication issues.

3.0 InRow RC Application for ACRC301 Series (apc_hw06_acrc2g_622.bin)

3.1 Hardware Compatibility

No incompatibilities

3.2 Firmware Compatibility

apc_hw06_aos_650.bin

Network Management Card Operating System & TCP/IP Stack

See 1.0 OS & TCP/IP Stack Modifications (apc_hw06_aos_650.bin) for a list of modifications and enhancements that affect this application version.

3.3 Known Issues in This Version

1. The "Automatic" setting for Air Flow Control is not translated.
2. The "On" and "Off" settings for the AFC Lamp Test are not translated.

3.4 New Features and Enhancements

None

3.5 Bugs Fixed in This Version

1. The group controller no longer drops CAN transmit messages when communicating with a large group of units.

4.0 Device IP Configuration Wizard

The Device IP Configuration Wizard is a Windows-based application designed specifically to remotely configure the basic TCP/IP settings of Network Management Cards. The Wizard runs on Windows® 2000, Windows 2003, Windows Vista, Windows XP, Windows 7, Windows Server 2008, Windows Server 2016, Windows 8, Windows 10, and Windows 2012. This utility supports cards that have firmware version 3.X.X or higher and is for IPv4 only.

The Wizard is available as a free download from the American Power Conversion Web site (www.apc.com/tools/download).

1. On the Web site, select **Software Upgrades - Wizards and Configurators** from the **Filter by Software/Firmware** drop-down list .
2. Click **Submit** to view the list of utilities available for download.
3. Click on the **Download** button to download the Device IP Configuration Wizard.

4.1 Compatibility

This utility supports cards that have firmware version 3.0.x or higher and is for IPv4 only.

4.2 Known Issues in This Version

None

5.0 Miscellaneous

5.1 Recovering From a Lost Password

See the *Online Guide*, available from the unit product page on the Schneider Electric Web site (www.schneider-electric.com or www.apc.com), for instructions on how to recover from a lost password.

5.2 PowerNet MIB Reference Guide

The MIB Reference Guide, available on the Schneider Electric Web site (www.schneider-electric.com or www.apc.com), explains the structure of the MIB, types of OIDs, trap severity levels, and the procedure for defining trap receivers. For information on specific OIDs, use a MIB browser to view their definitions and available values directly from the MIB itself. You can also view the definitions of traps at the end of the MIB (the file with the .mib extension listed in section 3.2, available on the Schneider Electric Web site (www.schneider-electric.com or www.apc.com)).

5.3 Event Support List

For the event names and event codes for all events supported for a device, first retrieve the config.ini file. To use FTP retrieve config.ini, perform the following:

1. Open a connection to the device using its IP Address:

```
ftp> open <ip_address>
```
2. Log on using the Administrator user name and password.
3. Retrieve the config.ini file containing the settings of the device.

```
ftp> get config.ini
```

The file is written to the folder from which you launched FTP.

In the config.ini file, find the section heading [EventActionConfig]. In the list of events under that section heading, substitute 0x for the initial E in the code for any event to obtain the hexadecimal event code shown in the display interface and in the documentation. For example, the hexadecimal code for the code E0033 in the config.ini file is 0x0033.

5.4 MD5, SHA-1, and SHA-256 Hash Signatures

MD5 Hash: e71917b59d589bbd020a23c2656860a9

SHA-1 Hash: dc18af1df495063b32fa294bc069f0dcf52b4d57

SHA-256 Hash:

3a4050d6646048faab480b83125a4f435210554534f1120edbda8d76c2083f67

5.5 Updating Touchscreen Display Font Files

Customers wishing to use the Chinese language translations will have to upgrade the font files used to generate the characters. This can only be done using a USB flash drive through the USB port on the front of the touchscreen display. The instructions are as follows:

Before starting the transfer, make sure the USB drive is formatted in FAT32.

1. Download the firmware upgrade files and unzip them.
2. Create a folder named apcfirm on the USB flash drive.
3. Place the extracted module files `apc_hw06_tsfonts4i1_604.bin` and `apc_hw06_tsfonts4i2_604.bin` in the apcfirm directory.
- 4.
5. Use a text editor to create a file named `upload.rcf`. (The file extension must be `.rcf`, not `.txt` for example.)
6. In `upload.rcf`, add the following lines to the file:
`FONT1=apc_hw06_tsfonts4i1_604.bin`
`FONT2=apc_hw06_tsfonts4i2_604.bin`
7. Place `upload.rcf` in the apcfirm folder on the flash drive.
8. Insert the flash drive into the USB port on the cooling unit display interface.
9. Press the Display Reset button and wait for the card to reboot fully.
10. Remove the USB drive from the display interface.

5.6 Firmware Upgrade Recommendation

This firmware version contains group multi-cast addressing support which is not compatible with firmware versions that use broadcast addressing. The group data items will not propagate the same between these two group addressing methods.

When upgrading firmware in a group of units that contain controller firmware revision earlier than revision 1.28.0, it is recommended that the group be split into two groups with one group consisting of units running the older firmware version and the other group with units running the new firmware release. Isolate a unit from the group, upgrade the unit to the current firmware version, verify that the unit has fully upgraded all firmware versions and then add the unit to the group of units that have the new firmware version. Continue this process until all of the units have been upgraded to the new firmware.

To verify that an isolated unit has been fully upgraded:

1. Verify the Display OS v6.5.0 and Application v6.2.2 firmware upgrades which can be viewed from About -> Display -> Firmware menu on the display interface or from the About page under Display section from the Web interface.
2. Verify the controller v1.29.0 firmware upgrade which can be viewed from About -> Unit menu on the display interface or from the About page under the Controller section from the Web interface. The Power LED will be blinking on the display interface while the controller is being upgraded. The Power LED will be solid green once the controller has been upgraded.

It is normal to have an "Unexpected Number of Units in Group" warning alarm while upgrading the firmware. Once all the firmware has been upgraded, this warning will clear.