

InRow® DX ACRD301- ACRH301 Series

For details on upgrading the InRow DX air conditioner firmware, see the *InRow RD Online Guide*, available from the InRow RD 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_664.bin	Network Management Card Operating System & TCP/IP Stack for Hardware Platform v06
apc_hw06_rd3xx_665.bin	ACRD301 and ACRH301 Application for InRow DX Air Conditioners
powernet428.mib or later	PowerNet SNMP Management Information Base (MIB)
990-5987*.xls	Modbus Register Map

2.0 OS & TCP/IP Stack Modifications (apc_hw06_aos_696.bin)

2.1 Compatibility

apc_hw06_rd3xx_671.bin

InRow ACRD301 and ACRH301 Series

2.2 Known Issues in This Version

1. RTWOCORE-3502 Device reboots and Https service gets disabled for storm packets at the Link rate of 10MB/s.
2. RTWOCORE-3214 Memory Leak issue hangs the sessions and reboots the NMC.
3. RTWOCORE-3083 Reboot loop caused by buffer overflow in track code
4. RTWOCORE-1749 Display reboots when we try to log in CLI 2nd session while UPS Event downloading time.
5. RTWOCORE-1736 Rhodes2 NMCs warmstart every 4.5 minutes during network storm caused by loopback condition.
6. RTWOCORE-1544 Warmstart occurs when multiple web pages are requested simultaneously.

2.3 New Features and Enhancements

1. SSLv3 and TLS 1.0 Removal. Removed SSLv3 and TLS 1.0 from the Web (including Minimum Protocolselection).
2. 3DES Removal (SSH/SSL). System-wide removal of 3DES to create a more secure system.
3. EAPoL Internationalization. Internationalized text has been added for EAPoL
4. AES128/256-CTR Cipher Addition for SSH. AES128-CTR and AES256-CTR have been added to SSH as a more secure alternative to CBC.
5. ECDHE Key-Exchange Addition for SSH. ECDHE has been added to SSH as a more secure alternative to DH.
6. Modbus TCP Keep-Alive. Modbus TCP now supports a keep-alive time period in which the connection will stay active when no activity is otherwise present.
7. Miscellaneous Cyber Security Fixes. Many improvements to security hardening, additional ciphers, and general optimizations have been added.

2.4 Bugs Fixed in This Version

1. RTWOCORE-4411 Deprecated SSH Cryptographic Settings
2. RTWOCORE-4336 Valid port for web and console not accepting after port value of 5000 error is displayed in FTP
3. RTWOCORE-4273 "Password change required" text should be displayed on trying SCP login
4. RTWOCORE-4246 Trap Receivers #4 and #5 only use the 1st SNMPv3 profile regardless of configuration
5. RTWOCORE-4234 Adding the line RemoveALLASISubscribers=yes under [SecureInterface] in the config.ini does not remove the entries
6. RTWOCORE-4231 Uploading an Excel File (.xlsx) in place of an SSL certificate causes NMC crash
7. RTWOCORE-4226 Uploading of full config.ini causes warmstart
8. RTWOCORE-4205 Generating debug file and ftp'ing datalog causes warmstart
9. RTWOCORE-3787 INI: DHCPBootpUserClass field accepts 256 characters, Web and CLI only accept 64 characters
10. RTWOCORE-3786 INI: DHCPBootpClientID field accepts 256 characters, Web and CLI only accept 64 characters
11. RTWOCORE-3785 INI: DHCPBootpVendorClass field accepts 256 characters, Web and CLI only accept 64 characters
12. RTWOCORE-3719 Web configuration for RADIUS secret seems to allow for 64 characters, CLI only allows 32
13. RTWOCORE-3702 CLI: smtp -w cli command will only take a value 63 chars long, web takes up to 64 chars
14. RTWOCORE-3701 CLI: smtp -u cli command will only take a value 127 chars long, web takes up to 128 chars
15. RTWOCORE-3700 CLI: smtp -f cli command will only take a value 127 chars long, web takes up to 128 chars
16. RTWOCORE-3691 CLI: user -n <username> -ts command does not reject garbage value entry. Instead it sets value to Metric
17. RTWOCORE-4474 Treck Vulnerabilities (Ripple20) - April 2020
18. RTWOCORE-4615 Treck Vulnerabilities (Ripple20) - December 2020

3.0 InRow RD301- RH301 Application (apc_hw06_ rd3xx_671. bin)

3.1 Hardware Compatibility

No incompatibilities

3.2 Firmware Compatibility

apc_hw06_aos_696.bin	Network Management Card Operating System & TCP/IP Stack
rd3xx_671_ruRu.lpk	Russian Language Pack
J5.2.3.26.bin	J5 R2 Controller
dsPIC1_v2.42.0.bin	J5 PIC1
dsPIC2_v2.35.0.bin	J5 PIC2

3.3 Known Issues in This Version

No known issues

3.4 New Features and Enhancements

This is the initial release of the product.

3.5 Bugs Fixed in This Version

1. Upgrade the essential DDF and Alarm Dictionary which old version alarm text mismatch.
2. Add some alarms to essential DDF which old version lacks.
3. Upgrade some alarms restore strings, in order to make them more clearly understandable.

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

4.2 Known Issues in This Version

None

Miscellaneous

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.

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: de153a241343fef9f0cd07dcb02a7dd6

SHA-1 Hash: aa1ed877db65991502ce7876eca26274b61915d8SHA-256

Hash: 1a418f299e3b66deb1f504f7d8b8bfaa05fe2af46af7f3956beb0c35a8773241

5.5 Updating Touchscreen Display Font Files