

## Firmware Release Notes 4.13.950

### Applicability

This firmware revision is intended for individual eConnect PDU's with an MCM2 or MCM3 controller or eConnect PDU's within a Secure Array, all of which have an MCM2 or MCM3 controller. Do not use this firmware version if any of the PDU's within the Secure Array has an MCM1 controller. Below is a guide to identify eConnect PDU controller:

#### MCM4 controller:

The unit is marked as "eConnect Controller 4"

The unit optionally has two Auxiliary Ports labeled as "AUX1" and "AUX2".

The unit has two USB connectors.

#### MCM3 controller:

The unit has two Auxiliary Ports labeled as "AUX1" and "AUX2".

The unit has the Ethernet Port labeled as "10/100/1000 MB".

The unit has two USB connectors.

#### MCM2 controller:

The unit does not have "AUX1" and "AUX2" ports.

The unit has the Ethernet Port labelled as "10/100/1000 MB".

The unit has one USB connector.

#### MCM1 controller:

The unit does not have "AUX1" and "AUX2" ports.

The unit has the Ethernet Port is labelled as 10/100 MB only.

The unit has one USB connector.

### Security Updates:

- Uploading of customer SSL Certificates has been enhanced.

### New Features:

- N/A

### Improvements:

- LCD:
  - Changes were made to the code to support LCD screens from other vendors.
  - This code change should be transparent to the user and does not alter the LCD behavior.

#### CPI Firmware Release Notes 4.13.950 (02/2023)

##### United States

Simi Valley, CA  
800-834-4969

##### Canada

Toronto, Ontario, Canada  
+905-850-7770  
www.chatsworth.com

##### Europe

Buckinghamshire, UK  
+441628524834

##### Middle East & Africa

Dubai, UAE  
+971-4-2602125

Doha, Qatar  
+974-4-267422

##### Latin America

Mexico City  
+52-55-5203-7525  
Toll Free within Mexico  
800-201-7592  
chatsworth.com.co

##### Asia Pacific

Shanghai  
+86 21 6880-0266  
chatsworth.com.cn



**Issues Addressed (see [Addendum](#)):**

- Customer SSL Certificate Uploading:
  - Addressed several issues with installing a custom certificate via the WebUI and Bulk endpoint.

**FYI:**

*The following was observed after installing a customer "Self-Signed" Certificate without a Certificate of Authority (CA) certificate (trusted root certificate).*

*At the time of testing, it was found that the Chrome web browser would randomly present the "Your connection is not private" warning screen while navigating through the WebUI.*

*This behavior was not observed when using the Microsoft Edge or Firefox web browsers*

**Known Limitations:**

- Emails and Traps for secondary alarms may contain metrics data that is up to a minute out-of-date.
- MCM2 and MCM3 units will report outlet level power factor, but this power factor is not acquired at an outlet level due to hardware limitations. The reading is acquired at the branch level and then copied to outlets associated with that branch.
- Any configuration changes made while running 4.1x.xxx, followed by returning to 4.4.253 are NOT preserved when 4.13.950 imports the data. Configuration changes made while running 4.4.253 ARE preserved.

**Upgrade Procedure:**

- Obtain the firmware .zip file from <http://www.chatsworth.com/support-and-downloads/downloads/software/>
- Unzip the contents of the file pn-cpi-924-30531-001-20221209-svn22343.zip to a USB flash drive. There is one file which must be transferred to the root directory: cpipack3-20221209-svn22343.bin.
- Plug the USB flash Drive into the USB port on the PDU and use the LCD menu to perform the firmware upgrade.
  - Confirm the new firmware version after the PDU reboots is 4.13.950

**Addendum – Packaging your certificate for upload to a PDU:**

To upload your own SSL Certificate to a PDU, the various components MUST be provided in a single file for upload, either as <Certificate Name>.zip or <Certificate Name>.pem.

## Files Required:

- Your Private Key
  - o <Certificate Name>.key
  - BEGIN RSA PRIVATE KEY-----
  - {...}
  - END RSA PRIVATE KEY-----
- Your Certificate (generated with your 'Private Key')
  - o <Certificate Name>.cert
  - BEGIN CERTIFICATE-----
  - {...}
  - END CERTIFICATE-----

## Optional File:

- Your CA Certificate
 

A 'CA' Certificate is a trusted root certificate or a Certificate of Authority. These must be acquired from an established public certificate of authority.

  - o <Certificate Name>.pem
  - BEGIN CERTIFICATE-----
  - {...}
  - END CERTIFICATE-----

**Option 1 - <Certificate Name>.zip:**

The file names are critical as the system needs to know what the individual components are.

The simplest way to package your certificate elements is to compress them into a zip file. The system will unzip the file, identify the components and combine them prior to installing the certificate.

**Option 2 - <Certificate Name>.pem:**

Alternately, you may combine the 3 components into a single file (this file must be in PEM format).

This file will contain contents from the other files and the contents will look like this:

```
-----BEGIN RSA PRIVATE KEY-----
{...}
-----END RSA PRIVATE KEY-----
-----BEGIN CERTIFICATE-----
{...}
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
{...}
-----END CERTIFICATE-----
```

-----

**Your Private Key**

**Your Certificate**

**Your CA Certificate**

This should be named `<Certificate CA Name>.pem`

### Uploading – your certificate:

The package you create, either a .zip or .pem file, is identified, using the WebUI or Bulk endpoint, and saved to the PDU.

### Verify certificate installation:

To verify that your certificate has been correctly installed, you can check...

WebUI : Settings : Network

#### Web Access Settings

Enable HTTP

Enable HTTPS

Manufacturer Certificate

Customer Certificate

Choose a cert to upload:  No file chosen

[View Certificate](#)

CLI:

```
PDU Name (0) : elevate
OK:Entering Elevated Mode
PDU Name (0) # elevate
OK:Entering Admin Mode
PDU Name (0) $ sslcert status
Customer defined certificate Enabled:
OK:Complete
PDU Name (0) $ █
```

### Bulk Endpoint:

Send a "GET" to the "bulk/cert" endpoint.

```
{"message":"Customer certificate is enabled.", "resultCode":0}
```



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