

# Dell EMC IPI Appliance Troubleshooting Guide

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## PDU's

### Lost Comms

There are two basic reasons why you may see 'Lost Comms' messages from PDU ports.

1. The PDU port is enabled, but does not have a PDU physically connected, in which case the port can be disabled.
2. The connection between the Dell EMC IPI Appliance PDU port and the PDU has become defective in some way.

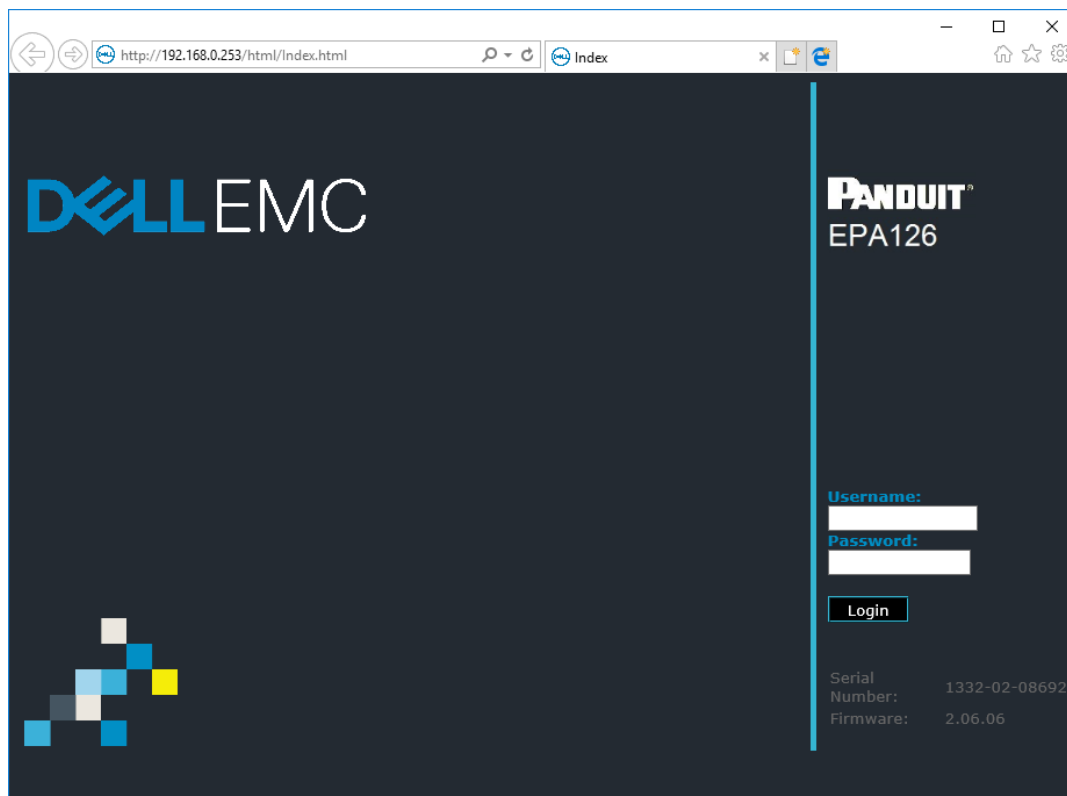
### Resolution

1. PDU Port Enabled but PDU not physically connected

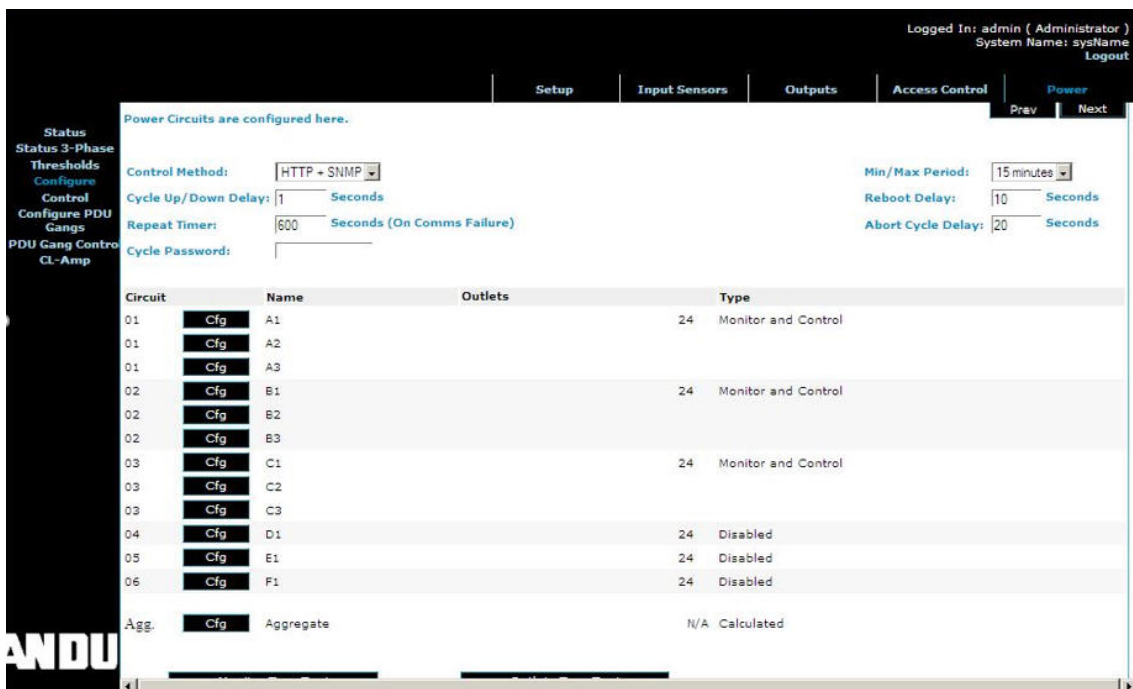
In this situation, the unused PDU ports may be enabled, but not physically connected to a PDU.

Example: a cabinet may contain 2 PDUs, but all 6 PDU ports may be enabled in the IPI Appliance, meaning that the 4 unconnected ports will generate 'Lost Comms' alerts.

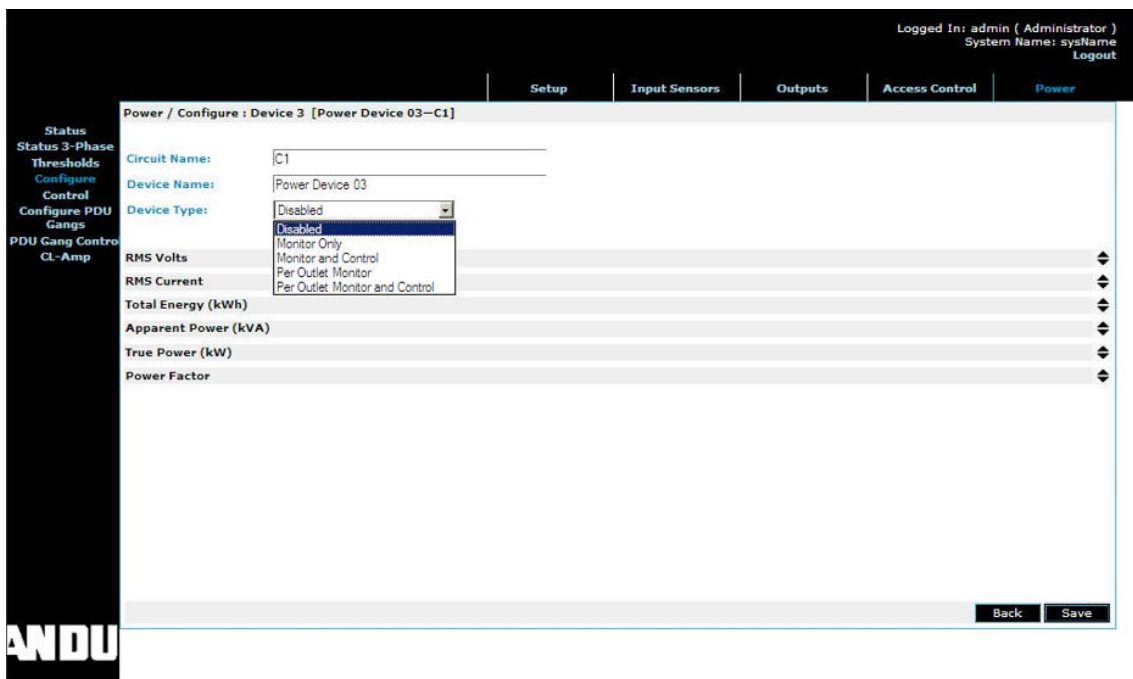
- A. Point your browser at the IP address for the IPI Appliance to get to the IPI Appliance login page as follows:



- B. Login with the relevant credentials.
- C. Navigate to the Power>Configuration screen as shown below:



- D. Then select the relevant CFG box next to the PDU port which needs to be disabled.
- E. NOTE – If only 2 POU’s are physically connected, to say ports 1 and 4 for example, then ports 2,3,5, and 6 need to be disabled to prevent ‘Lost Comms’ alerts from these ports.
- F. Selecting the port will take you to the screen shown below, Set the Device Type field to Disabled.



This should prevent any further “Lost Comms” alerts from the disabled ports.

2. Physical connection between IPI Appliance and PDU is defective

If there is a problem with the physical connection between the IPI PDU port and the physical PDU, you are likely to see 'Lost Comms' alerts from the IPI Appliance.

If all unused ports have been disabled as described in *Resolution 1* above, then the next step is to check the physical connections.

- A. Firstly, check which port is generating the alert, by examining the SNMP trap and/or email notification details, this will detail which port is generating the alerts.
- B. At the IPI Appliance end, check that there is a patch cable connected to the PDU port that is generating the alert.
- C. If the IPI Appliance connection is present and is secure, now check the relevant patch cable is connected to the PDU monitoring port on the PDU itself.



- D. If the above connection looks good – check that the LCD panel on the PDU is lit and displaying values, if it is not, replace the patch cable between the PDU and the IPI Appliance.
- E. If replacing the cable does not resolve the issue, then there may be a more significant hardware issue, please report this to Panduit Technical Support at [systemsupport@panduit.com](mailto:systemsupport@panduit.com) who will advise regarding next steps.

## Sensors

### “Lost Comms”

There are two basic reasons why you may see “Lost Comms” messages from Sensor ports.

1. The Sensor port is enabled, but does not have a Sensor physically connected, in which case the port can be disabled.
2. The connection between the IPI Appliance Sensor port and the Sensor has become defective in some way.

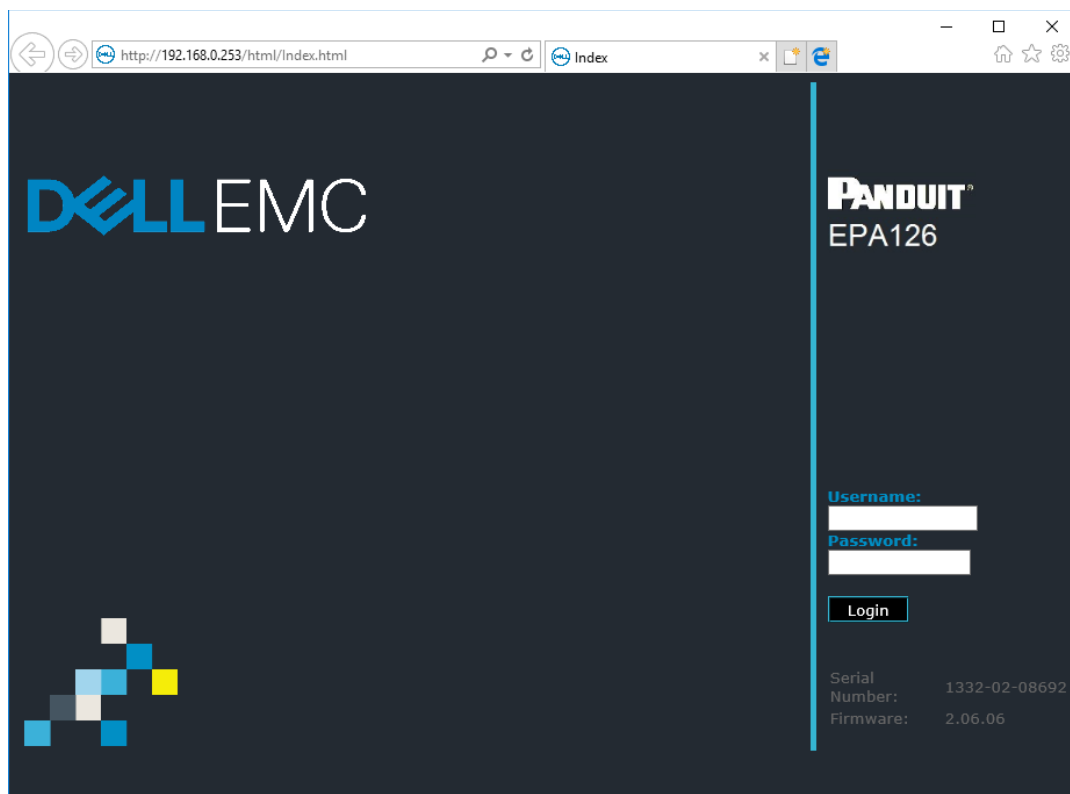
### Resolution

1. Sensor Port Enabled but Sensor not physically connected

In this situation, the unused Sensor ports may be enabled, but not physically connected to a Sensor.

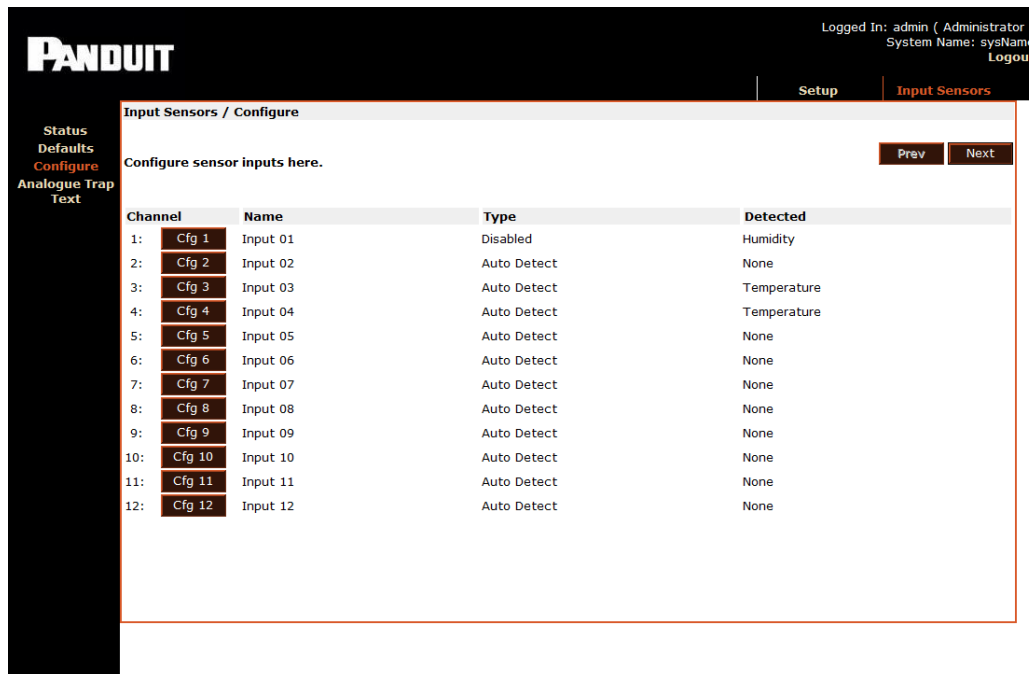
Example: a cabinet may contain 3 Temperature Sensors, but all 6 Sensor ports may be enabled in the IPI Appliance for Temperature Sensors, meaning that the 2 unconnected ports will generate ‘Lost Comms’ alerts.

- A. point your browser at the IP address for the IPI Appliance to get to the IPI Appliance login page as follows:



- B. Login with the relevant credentials

C. Navigate to the Input Sensors>Configure screen as shown below:



D. Then select the relevant CFG box next to the Sensor port which needs to be disabled.

E. Selecting the port will take you to the Configuration Port screen. Set the Device Type field to Auto Detect.

This should prevent any further “Lost Comms” alerts from the Unused ports.

## Traps not being received by Vision or another Management system

– Symptoms:

Vision not receiving events/alarms from IPI Appliance or health status lost

– Action:

- Check if IPI Appliance has any active events

- Check if the Enable flag has been turned off in Input Sensors -> Configure screen
- Check IPI Appliance SNMP Rec'rs tab and verify IP, Community strings, and Access
- Send a test alarm to the SNMP receiver

## Temperature sensor reporting an alarm

– Symptoms:

A red icon  or amber  icon or icon is **missing** for a sensor

– Action:

- Check thresholds setting for the specific sensor is in range of Dell EMC specs
- Ensure that sensor patch cord is connected properly
- Check if sensor is detected by IPI Appliance as temperature type
- Check if sensor name 'Channel' matches with sensor type
- Ensure sensor status is in Enabled state
- Switch the sensor to an empty port, 11 or 12 on IPI Appliance, and check if problem persists
- Sensor may have been damaged/malfunctioning, contact Panduit System Support

## Ping works but cannot get into web-interface

– Symptoms:

IPI Appliance can be ping'ed but cannot access web-interface

– Action:

- Usually a transitional state
- Soft reset the IPI Appliance via reset button on the IPI Appliance front or rear
- Wait for 1-1.5min for web interface to initialize
- Check firewall settings on the browser

- If problem persists, contact Panduit System Support as a hard-reset may be required due to a firmware fault

## IPI Appliance Reset

### – IPI Appliance hard-reset

- If IPI Appliance is not responsive after a soft reset - As a last resort, a factory reset can be performed under supervision of Panduit System Support
- Dell EMC IPI configuration will be overwritten – Vision/Access
- No impact to power outlets – power supply to devices
- Need to Restore Dell EMC spec
- Recommended to be done w/ Panduit System Support

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## Reset Gateway to Factory Defaults EPA126/EP042

Timeline

Action

Unified Physical Infrastructure

building a smarter, unified business foundation  
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IP Address	192.168.0.253
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
Web Management Address	http://192.168.0.253/
Default username	admin
Default password	admin

## Cannot ping the IPI Appliance

– Symptoms:

Cannot ping the IPI Appliance or Vision cannot contact/reach IPI Appliance

– Action:

- Check speed and link LED on IPI Appliance front interface are on (speed should be solid and link LED may be blinking)
- Make sure network connection to IPI Appliance is good/stable - IPI Appliance to switch
- Confirm if switch port supports 10/100 speed
- Ensure that your computer has access to network segment of the IPI Appliance IP segment

## IPI Appliance displaying an alarm – Red Alarm LED on

– Symptoms:

IPI Appliance show a red alarm LED in front and rear of the IPI Appliance

– Action:

- This is an indication of a sensor showing value exceeding the set threshold limit
- Log into the IPI Appliance and check the Input Sensor screen for 'Value' vs the 'Limits' fields
- Based on the threshold violation, Dell EMC may have a policy in place for recommended action for e.g. what action to recommend to client if temp is

showing more than 95F at 'RD M Temp' sensor. The recommendation could be to lower the set point of the CRAC/CRAH or adjust air dampeners etc.

## IPI Appliance unit has been reset?

### – Symptoms:

IPI Appliance seems not working per spec or configuration don't match default

### – Action:

- Check the events log to see if all events have been wiped out
- Check the IPI Appliance Dell EMC defaults are set for e.g. System Name value and sensor names etc

## Connectivity between IPI Appliance and PDU lost

### – Symptoms:

Vision not reporting power readings or power alarms reported on IPI Appliance

### – Action:

- Check if the connection between IPI Appliance and PDU via a RJ45 patch cords has been disconnected
- Check if the display panel driven by low-voltage supply from IPI Appliance, is enabled on the PDU
- NOTE: The IPI Appliance disconnection to the PDU does not affect the power supply to PDU outlets. It only affects monitoring and control of power outlets

## How to audit IPI Appliance activities and changes

### – Symptoms:

A change is made to IPI Appliance or access to VBlock cabinet

### – Action:

- Log into the IPI Appliance click on the 'Events' link in the Setup screen
- Review the events and timestamp to determine change or access logs

## Power A and/or B Feed on IPI Appliance are disconnected/powered down

- Symptoms:  
IPI Appliance lost power or is on single power feed
  
- Action:
  - IPI Appliance has A & B power feeds and both must be disconnected to lose power on the IPI Appliance
  - If either feed A or B are disconnected, IPI Appliance power should not be disrupted
  - If both feeds are disconnected and reconnected, the result would be similar to a soft reset
  - Data loss will be for the duration of IPI Appliance downtime and no aggregation will take place - all setup configuration will be retained

## Power goes down in VBlock, how to get access inside the cabinet

- Symptoms:  
VBlock power offline or no power to IPI Appliance – Door lock LEDs are off
  
- Action:
  - Access control on VBlock is via HID reader cards and power door handles - without power they cannot operate
  - Clients would have to get access to physical key to the front/rear door and access the cabinet
  - Policies for Access control via Door Key (physical key access) would need to be communicated to client

## Panduit Technical Support for Dell EMC IPI Appliance

- Severity 1 & 2 Issues call - 24x7:
  - Americas: +1-866-721-5302
  - EMEA: +44-1291-674661

- Severity 3 & 4 Issues email - normal business hours:
  - Global: [systemsupport@panduit.com](mailto:systemsupport@panduit.com)

Information to provide when opening an incident with Panduit Support:

- Client Name/Location
- Dell EMC Incident or Issue Number (if you have one for reference)
- Short Description
- Any steps taken so far to address the issue
- S/w, F/w Version; P/N's if known
- Screenshots/Videos on how to replicate if possible
- Return Contact info