

EWS User Guide

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Accessing the Embedded Web Server (EWS)

To access the EWS, an ethernet cable connected to the LAN must be plugged into the port labelled 'ETH' on the EWS.

DHCP is enabled by default. For the EWS to obtain an IP address it must be connected to a network with DHCP server. The initial IP address may be obtained by either:

- On the front panel of the EWS, press either button labelled 'A' or 'B' multiple times until the IP address is displayed
- Inspect the DHCP server lease information

Once the IP address has been obtained the device may be accessed at the following URL:

- <https://IPAddress>

It is recommended to use Google Chrome, Microsoft Edge or Mozilla Firefox to access the EWS.

The EWS will prompt for a username and password. The default username and passwords are configured as follows:

- Username: admin
- Password: admin

Dashboard

The EWS dashboard provides summary information of the IPDU and its sensors. It is split into 4 panels containing information about Feed A, Feed B, Externals and Recent Events.

The dashboard is divided into four main sections: Feed A, Feed B, Externals, and Recent Events. Each section provides detailed status and sensor data.

Feed A

Description: Customer Feed A Description

Front Panel: Power (ON), Alarm (OFF), Relay (OFF)

Circuit Breakers: 4.9A CB1A (ON), 6.0A CB2A (ON), 4.9A Customer (ON), 5.4A Description (ON), 0.0A (ON), 0.0A (ON), 0.0A (ON), 0.0A (ON)

Feed Sensors:

Power	Voltage	Current	Busbar	Core
1.0kW	48.0V	21.2A	23.9°C	30°C

Feed B

Description: Customer Feed B Description

Front Panel: Power (ON), Alarm (OFF), Relay (OFF)

Circuit Breakers: 0.0A CB1B (ON), 0.0A CB2B (ON), 0.0A Customer (ON), 0.0A Description (ON), 0.0A (ON), 0.0A (ON), 0.0A (ON), 0.0A (ON)

Feed Sensors:

Power	Voltage	Current	Busbar Temp	Core Temp
0.0kW	48.0V	0.0A	23.9°C	29°C

Externals

Inputs: IN1 Customer (OFF), IN2 Description (OFF), IN3 (OFF), IN4 (OFF)

Temperature:

Temp1	Humidity1	Temp2	Humidity2
25.5°C	37.8%	26.5°C	38.0%

Recent Events

Event Log:

Date	Time	Event
12/01/2025	2:07 pm	Network - DHCP Enabled
12/01/2025	12:11 pm	Cleared - Feed B CB4 tripped
12/01/2025	12:10 pm	Alarm - Feed B CB4 tripped
12/01/2025	12:10 pm	Cleared - Feed A CB4 tripped
12/01/2025	12:10 pm	Alarm - Feed A CB4 tripped
12/01/2025	12:09 pm	Power - EWS start, power on reset
12/01/2025	12:07 pm	Power - EWS shut down
12/01/2025	12:06 pm	Power - EWS start, software reset
12/01/2025	12:06 pm	Firmware - Update completed successfully
12/01/2025	12:05 pm	Power - EWS start, software reset

Footer: Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Description

The description field is an optional field that can be set on the Monitoring – Alarms page.

Front Panel

Power

The image labelled power on the EWS indicates the feed power status. If a feed is powered, the image labelled power will display ON in green. If there is no power on a feed the image labelled power will display OFF in red.

The state of the two green physical power LEDs on the front panel of the IPDU reflects the input power on feed A and feed B. A feed power LED is illuminated when the feed voltage is within specification, between 19V and 58V. When the feed voltage is outside this range the corresponding feed power LED flashes while the EWS is operating.

Alarm

If no alarm is set against a sensor, the colour of the text or image is grey. When an alarm is triggered and the LED checkbox is checked on the alarms page, the EWS image on the dashboard labelled alarm displays ON in red. When no alarm is triggered, the image labelled alarm displays OFF in green.

The state of the two red physical LEDs on the IPDU front panel illuminates when an alarm is triggered and the LED checkbox is checked on the alarms page.

Relay

An alarm may be mapped to the Feed A or B relay by ticking a corresponding relay box. Should the alarm be activated, the relay will be turned on, and its indicator red. The table below shows the relationship between the alarms and relay:

Alarm State	Relay Indicator Colour	Relay Indicator Text	Relay Coil	Contacts
Alarm	Red	ON	Unenergised	Open
No Alarm	Green	OFF	Energised	Closed

Circuit Breakers

A tripped or not present circuit breaker will display OFF in its status image. A circuit breaker that is power passing will display ON. If a feed has no power, the circuit breakers will not display. If any alarm checkbox is checked for a circuit breaker on the alarms page, the image will display red for tripped and green for power passing. If current sensing is enabled, the current per circuit breaker will be displayed below the circuit breaker status.

Feed Sensors

If an alarm is enabled by checking any of the corresponding checkboxes, the status column will display green if the threshold has not been exceeded. Once the threshold has been exceeded, the status column will appear red. If no alarms checkboxes are checked, the status column will appear in black.

Externals

Externals shows a summary of the digital inputs temperature and humidity sensors located behind display of the EWS.

Recent Events

The last 10 events are displayed on the dashboard.

Monitoring

Monitoring – Alarms

The alarms page is used to configure alarms and descriptions for the main sensors on the IPDU.

Feed A

Description:

Circuit Breakers

Name	Status	Current(A)	Low(A)	High(A)	LED	Relay	SMTP	SNMP	Description
CB1	ON	4.9	<input type="text" value="7.0"/>	<input type="text" value="7.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CB1A
CB2	ON	6.0	<input type="text" value="7.0"/>	<input type="text" value="7.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CB2A
CB3	ON	4.9	<input type="text" value="7.0"/>	<input type="text" value="7.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Customer
CB4	ON	5.4	<input type="text" value="7.0"/>	<input type="text" value="7.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Description
CB5	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CB6	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CB7	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CB8	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Sensors

Name	Sensor	Lower	Upper	LED	Relay	SMTP	SNMP	Description
Voltage(V)	47.8	<input type="text" value="40.0"/>	<input type="text" value="56.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Current(A)	21.2	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Busbar(°C)	24.0	<input type="text" value="60.0"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Core(°C)	30	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Feed B

Description:

Circuit Breakers

Name	Status	Current(A)	Low(A)	High(A)	LED	Relay	SMTP	SNMP	Description
CB1	ON	0.0	<input type="text" value="12.0"/>	<input type="text" value="12.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CB1B
CB2	ON	0.0	<input type="text" value="12.0"/>	<input type="text" value="12.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CB2B
CB3	ON	0.0	<input type="text" value="6.5"/>	<input type="text" value="6.5"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Customer
CB4	ON	0.0	<input type="text" value="6.0"/>	<input type="text" value="6.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Description
CB5	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CB6	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CB7	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CB8	ON	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Sensors

Name	Sensor	Lower	Upper	LED	Relay	SMTP	SNMP	Description
Voltage(V)	48.0	<input type="text" value="0.0"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Current(A)	0.0	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Busbar(°C)	23.7	<input type="text" value="-20.0"/>	<input type="text" value="60.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Core(°C)	29	<input type="text" value=""/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Description

The description field is an optional field that can be set, which is also displayed on the dashboard.

Circuit Breakers

Circuit Breaker report the status of ON if it is present and power passing. A tripped (or missing) circuit breaker will display the status of OFF. Circuit Breaker alarms can be configured by changing lower and upper thresholds, or removing the numbers to disable them. Checking a LED, Relay, SMTP or SNMP checkbox enables the alarm. The alarm is triggered when the circuit breaker is tripped, or the threshold is See LED, Relay, SMTP and SNMP below for further explanation.

Sensors

Voltage, current and temperature alarms can be configured by changing lower and upper thresholds. An upper threshold must be exceeded for the alarm to be set, and the value must be smaller than the threshold for it to be cleared. Checking a LED, Relay or SMTP checkbox enables the alarm. See LED, Relay and SMTP below for further explanation.

LED Checkbox

If the LED checkbox is checked, and an alarm condition is met, the alarm LED image on the EWS dashboard and the physical front panel LED will display red. If no alarm condition is met, the EWS LED image will display green and the front panel LED will go out.

Relay Checkbox

If the relay checkbox is checked, and an alarm condition is met, the relay contacts are open and on will display in red. Likewise if no device is plugged into the relay port. If no alarm condition is met, the relay contacts will be closed.

SMTP Checkbox

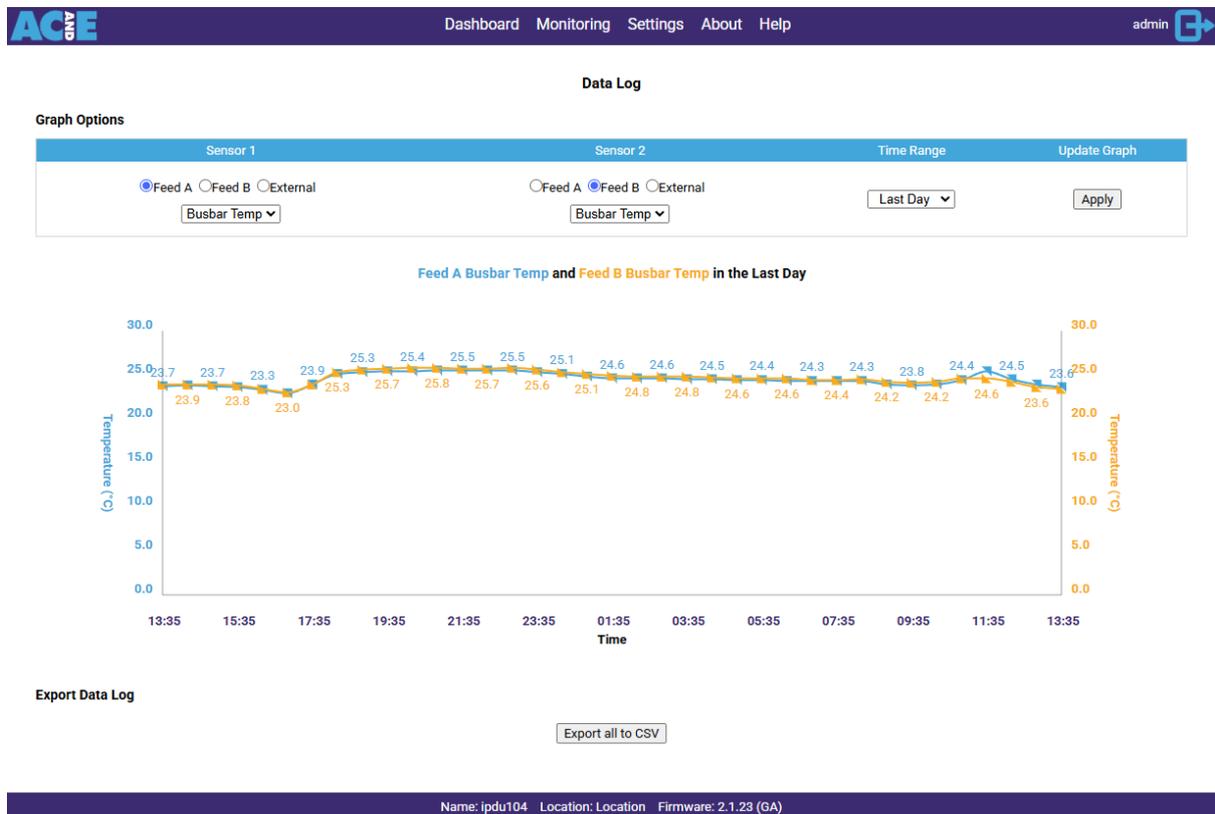
For SMTP to function, SMTP must be configured in Settings - SMTP and the SMTP checkbox must be checked. An email is sent when the component changes state containing the components details and its new state.

SNMP Checkbox

For SNMP to publish alarms or send traps, SNMP must be configured in Settings - SNMP and the SNMP checkbox must be checked. Traps are sent when the component changes into an alarm state.

Monitoring – Data Log

The data log allows you to see a graph over time of the readings from each sensor on the EWS. Not all sensors are logged by default, this can be configured on the Settings – Data Log page.



Graph Options

The graph plots two sensors to allow a comparison over time. The time range may be set to the last hour, day, week or month.

Export Data Log

The data log may be exported to a CSV file to allow custom calculations to be performed on the raw data recorded from the sensors.

Monitoring – Expansion

The expansion bus provides a way to add sensors powered by the EWS using standard ethernet cables. The following example shows a temperature and humidity node plugged into the EWS.

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Temp and Humidity

Serial	Connected	Description
11223344	●	<input style="width: 90%;" type="text"/>

Probe	Sensor	Alarm	Reading	Alarm Low	Alarm High	Alarm Output		Sensor Description
						LEDs	SMTP	
P1	Temp(°C)			<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>
P1	RH(%)			<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>
P2	Temp(°C)		25.7	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>
P2	RH(%)		41.1	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>
P3	Temp(°C)			<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>
P3	RH(%)			<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>
P4	Temp(°C)			<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>
P4	RH(%)			<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input style="width: 90%;" type="text"/>

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Monitoring – Event Log

The event log records historic events relating to the EWS Status and alarm thresholds met.

For the event log to record an error on a sensor, at least one output checkbox must be enabled. This includes LED, Relay, SMTP or SNMP.

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Event Log

Filters

All	System	Feed A	Feed B	External	System Alarm
<input checked="" type="checkbox"/>					

Apply

Log

Date	Time	Event
12/01/2025	2:07 pm	Network - DHCP Enabled
12/01/2025	12:11 pm	Cleared - Feed B CB4 tripped
12/01/2025	12:10 pm	Alarm - Feed B CB4 tripped
12/01/2025	12:10 pm	Cleared - Feed A CB4 tripped
12/01/2025	12:10 pm	Alarm - Feed A CB4 tripped
12/01/2025	12:09 pm	Power - EWS start, power on reset
12/01/2025	12:07 pm	Power - EWS shut down
12/01/2025	12:06 pm	Power - EWS start, software reset
12/01/2025	12:06 pm	Firmware - Update completed successfully
12/01/2025	12:05 pm	Power - EWS start, software reset
12/01/2025	12:04 pm	Cleared - Feed A CB4 current 5.4A
12/01/2025	12:04 pm	Cleared - Feed A CB3 current 4.9A

<< Previous Page 1 Next >> Export Log

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Filters

A filter may be selected to reduce the number of events displayed to a subset as described below:

- All - Displays all events, with no filters applied
- System - Displays system events including reboots, feed failure, network changes, firmware changes and system resets
- Feed A and B - Displays feed events including circuit breaker voltage, current, temperature state changes
- External - Displays events relating to state changes for the external inputs, temperature and humidity sensors

Export Event Log

The event log may be exported to a CSV file to allow further analysis.

Monitoring – External Alarms

External alarms include the inputs and temperature and humidity sensors that can be plugged into the back of the EWS.

If the output LED checkbox is selected for one of these sensors, both Feed A and Feed B LEDs are triggered. Likewise for the relay outputs.

External Alarms

Inputs

Name	Status	LEDs	Relays	SMTP	SNMP	Description
IN1	OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Customer
IN2	OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Description
IN3	OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
IN4	OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Sensors

Name	Sensor	Lower	Upper	LEDs	Relays	SMTP	SNMP	Description
Temp1(°C)	24.9	<input type="text"/>	55.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Humidity1(%)	39.6	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Temp2(°C)	25.7	<input type="text"/>	55.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Humidity2(%)	40.3	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

[Update External Alarm Settings](#)

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External Inputs

All external inputs are isolated. If an input is unenergised, the input is OFF. If an alarm is programmed, the unenergised input signals an alarm and is displayed in red. If an input is energised, the input is ON. If an alarm is programmed, the energised input signals no alarm and is displayed in green.

Input State	Display State	Colour if Alarm Set	Colour if No Alarm Set
Energised	ON	Green	Grey
Unenergised	OFF	Red	Grey

Monitoring – Power

The power log stores feed voltages and currents for 12 months. Each second, the feed voltage and current is recorded and averaged over a 5 minute period, then stored and available for download via CSV.



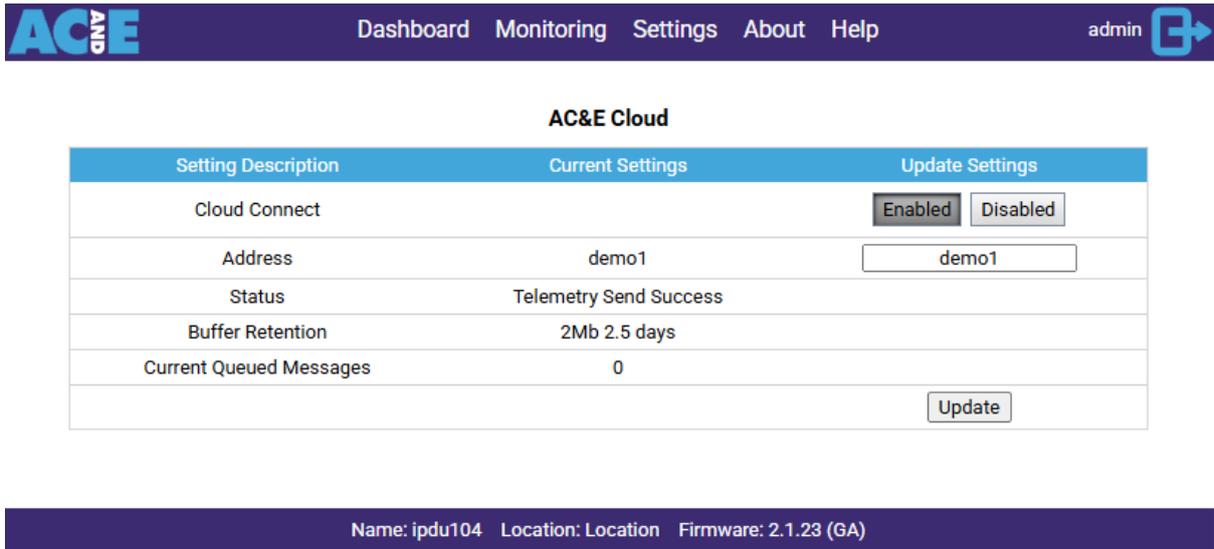
Settings

Settings – Cloud

EWS may be pre-programmed to connect automatically to the cloud.

To manually configure a cloud connection, enter the address provided by AC&E in the address field. The status of the connection may be seen under the status field.

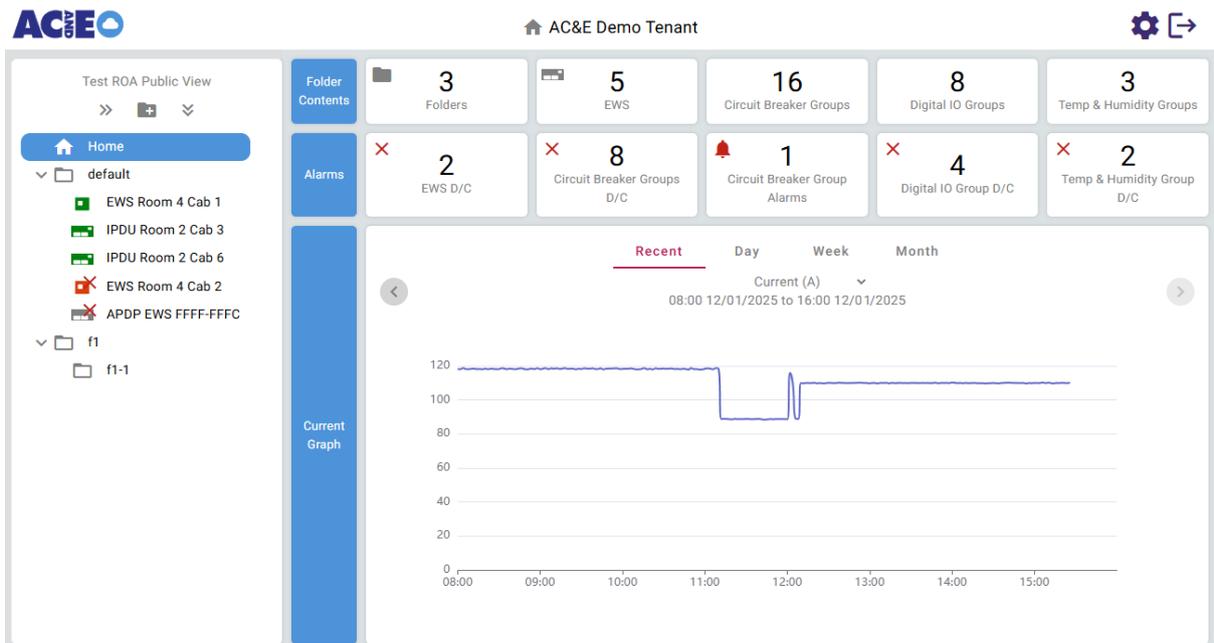
By default, the EWS will remain connected to the cloud, publishing telemetry every 60 seconds.



Setting Description	Current Settings	Update Settings
Cloud Connect		<input checked="" type="checkbox"/> Enabled <input type="checkbox"/> Disabled
Address	demo1	<input type="text" value="demo1"/>
Status	Telemetry Send Success	
Buffer Retention	2Mb 2.5 days	
Current Queued Messages	0	
		<input type="button" value="Update"/>

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For more information about the AC&E Cloud, see the AC&E Cloud User Guide at <https://www.acande.com/support/ipdu/documentation/>.



AC&E Demo Tenant

Test ROA Public View

- Home
- default
 - EWS Room 4 Cab 1
 - IPDU Room 2 Cab 3
 - IPDU Room 2 Cab 6
 - EWS Room 4 Cab 2
 - APDP EWS FFFF-FFFC
- f1
 - f1-1

Folder Contents: 3 Folders

Alarms: 2 EWS D/C, 8 Circuit Breaker Groups D/C, 1 Circuit Breaker Group Alarms, 4 Digital IO Group D/C, 2 Temp & Humidity Group D/C

Summary Cards: 3 Folders, 5 EWS, 16 Circuit Breaker Groups, 8 Digital IO Groups, 3 Temp & Humidity Groups

Current Graph: Recent, Day, Week, Month. Current (A) 08:00 12/01/2025 to 16:00 12/01/2025

Settings – Data Log

Each checkbox controls whether an IPDU sensor is logged on the EWS.

The frequency controls how often each sensor is recorded. Changing the checkboxes or frequency updates the estimated log retention or how long the data can be stored for before it is overwritten.

The update settings button applies the settings and wipes the current log.

The data log may be exported to CSV by clicking the button.

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Data Log

Enable Feed Data Logging

Feed Sensors	Feed A	Feed B
Voltage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Current	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Busbar Temp	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Core Temp	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Circuit Breaker Status	Feed A	Feed B
All Circuit Breakers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Circuit Breaker Current	Feed A	Feed B
CB1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CB2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CB3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CB4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CB5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CB6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CB7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CB8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Data Log

Enable Data Logging

Relay and Ext In	
All Relay and Ext In	<input checked="" type="checkbox"/>
Ext Temp and Humidity	
Temp1	<input checked="" type="checkbox"/>
Humidity1	<input checked="" type="checkbox"/>
Temp2	<input checked="" type="checkbox"/>
Humidity2	<input checked="" type="checkbox"/>

Set Logging Frequency

Setting Description	Update Settings
Estimate Log Retention	43 days, 15 hrs, 53 minutes
Frequency in seconds	<input type="text" value="15"/> [range:1-3600]

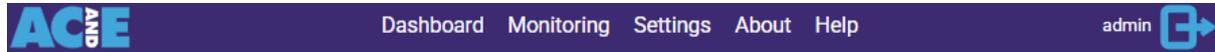
Changing the data log settings will also delete all current log entries.

You may want to export the data before continuing.

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Settings – Date and Time

The date and time on the EWS are automatically updated from the internet using SNTP if it is available. The current SNTP status, date, time, and SNTP servers on the EWS are displayed. The SNTP servers may be updated using either a DNS name, or an IP address.



Date and Time

Change the Date and Time

Setting Description	Current Settings	Update Settings
SNTP Enabled	Enabled	<input type="button" value="Enable"/> <input type="button" value="Disable"/>
Date	12/01/2025	
Time	02:26:20 PM	
Primary SNTP Server	pool.ntp.org	<input type="text" value="pool.ntp.org"/>
Secondary SNTP Server	time.google.com	<input type="text" value="time.google.com"/>
SNTP Status	SNTP updated successfully	
Browsers Timezone	GMT+1100 (Australian Eastern Daylight Time)	<input type="button" value="Update"/>



The time may be set manually by disabling SNTP, and the entering the time manually.



Date and Time

Change the Date and Time

Setting Description	Current Settings	Update Settings
SNTP Enabled	Enabled	<input type="button" value="Enable"/> <input checked="" type="button" value="Disable"/>
Date	12/01/2025	<input type="text" value="12/01/2025"/> <input type="button" value="📅"/>
Time	02:27:29 PM	<input type="text" value="02:25:59 PM"/> <input type="button" value="🕒"/>
Browsers Timezone	GMT+1100 (Australian Eastern Daylight Time)	<input type="button" value="Update"/>



Settings – Expansion

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Expansion Settings

Baud	CRC Error	Cycles/Sec	Allow Firmware Downgrade	Update Firmware
115200 <input type="button" value="Change"/>	0	91	<input checked="" type="checkbox"/>	<input type="button" value="Choose file"/> No file chosen

Expansion Devices

ID	Model	Serial	Firmware Version	Description	Bus Voltage	Node Current	Last Contact	CRC Error Count	Startup Count	No Reply Count	Delete Node
1	Temp and Humidity	11223344	1.1.10		4.66		1	0	0	0	<input checked="" type="checkbox"/>

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Baud

The baud rate may be reduced to improve reliability in noisy environments. It is recommended to not touch this setting unless under the direction of AC&E support.

Firmware

Expansion device firmware may be obtained from the AC&E Support or the [AC&E website](#). When firmware is updated, all applicable nodes will be updated concurrently. EWS currently supports

- Temperature and Humidity Nodes
- Digital IO nodes

Deletion

Deletion will remove a node and any configuration and logs associated with it. The EWS will reboot to apply.

Settings – Firmware

There are two firmware banks so if the EWS fails to start multiple times in succession, the firmware is checked then restored to the alternate version.

To perform a firmware update, first upload the new firmware. Once the upload has complete, select change active firmware and click apply.

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Firmware

Update or Change the Active Firmware

Setting Description	Current Settings	Update Settings
Firmware A Version:	2.1.23 (Inactive)	<input type="button" value="Upload New Firmware to A"/>
Firmware B Version:	2.1.23 (Active)	<input type="button" value="Change Active Firmware to A"/>
		<input type="button" value="Choose file"/> <input type="text" value="ews_firmware.bin"/>
		<input type="button" value="Upload New Firmware"/>

Firmware validated, version 2.1.23

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Settings – Network

The hostname and location may be set on this page. By default, the network settings are obtained automatically from the network using DHCP. With DHCP selected, network settings are displayed in a read only manner.

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Network

Change the Network Settings

Setting Description	Current Settings	Update Settings
Hostname	ipdu104	<input type="text" value="ipdu104"/>
DHCP Status	DHCP	<input checked="" type="button" value="DHCP"/> <input type="button" value="Static"/>
IPv4 Address	192.168.10.104	
Subnet Mask	255.255.255.0	
Default Gateway	192.168.10.1	
Primary DNS	192.168.10.8	
Secondary DNS	8.8.8.8	
MAC Address	00:1e:c0:ad:12:ae	
<input type="button" value="Update"/>		

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Should a static IP address be required, click the “Static” button. Once selected, the relevant fields are displayed allowing the configuration of network settings.

Dashboard Monitoring Settings About Helpadmin 

Network

Change the Network Settings

Setting Description	Current Settings	Update Settings
Hostname	ipdu104	<input type="text" value="ipdu104"/>
DHCP Status	Static	<input type="button" value="DHCP"/> <input checked="" type="button" value="Static"/>
IPv4 Address	192.168.10.104	<input type="text" value="192.168.10.104"/>
Subnet Mask	255.255.255.0	<input type="text" value="255.255.255.0"/>
Default Gateway	192.168.10.1	<input type="text" value="192.168.10.1"/>
Primary DNS	192.168.10.8	<input type="text" value="192.168.10.8"/>
Secondary DNS		<input type="text"/>
MAC Address	00:1e:c0:ad:12:ae	
<input type="button" value="Update"/>		

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Settings – SMTP

SMTP is disabled by default and must be enabled and configured on this page. To configure, set the SMTP Client to “Enabled”.

The status field provides real-time feedback on the status of the last email. The SMTP server address may be a DNS name or IP address.



SMTP

Update SMTP Settings

Setting Description	Current Settings	Update Settings
Mail Server Address	mail.example.com	<input type="text" value="mail.example.com"/>
Sender Email Address	sender@example.com	<input type="text" value="sender@example.com"/>
Recipient Email Address	recipient@example.com	<input type="text" value="recipient@example.com"/>
Basic Authentication	Disabled	<input checked="" type="checkbox"/> Enabled <input type="checkbox"/> Disabled
Username		<input type="text"/>
Password		<input type="password"/>
<input type="button" value="Send Test Email"/>		<input type="button" value="Update"/>

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

Basic Authentication may be used to secure access to the SMTP server. Depending on the mail server configuration, the username may need to be entered in the form *domain\username*.

For emails to be sent based off a sensor, the following configuration is required:

- SMTP client needs to be configured on the SMTP settings page
- SMTP checkbox to be selected on the relevant sensor
- A low or high threshold needs to be configured (excluding tripped breakers and digital inputs)

Name	Sensor	Lower	Upper	LED	Relay	SMTP	SNMP	Description
Voltage(V)	48.0	<input type="text" value="40.0"/>	<input type="text" value="56.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Current(A)	21.2	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Busbar(°C)	23.8	<input type="text"/>	<input type="text" value="60.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Core(°C)	30	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>

In the above example, an email will be sent if the sensors value drops below ‘Alarm Low’, or exceeds ‘Alarm High’.

Settings – SNMP

SNMP MIB

The SNMP data provided by the EWS is defined in the MIB located on the AC&E website:

<https://www.acande.com/support/ipdu/ipdu-snmp-mib/>

The structure of the data is defined in the below table:

Parent OID	Description
1.3.6.1.5.1.1	System
1.3.6.1.4.1.50542	AC&E Enterprise ID
1.3.6.1.4.1.50542.1	IPDU
1.3.6.1.4.1.50542.1.4	Traps
1.3.6.1.4.1.50542.1.5	Trap Groups
1.3.6.1.4.1.50542.1.6	Feed Table
1.3.6.1.4.1.50542.1.7	Digital Inputs Table
1.3.6.1.4.1.50542.1.8	Digital Outputs Table
1.3.6.1.4.1.50542.1.9	Temp and Humidity Table
1.3.6.1.4.1.50542.1.10	Digital IO Table

SNMP Server

The SNMP server is enabled by default allowing requests in both version 1 and version 2c, with a community string of public.

Setting Description	Current Settings	Update Settings
SNMP Version	v1 and v2c	<input checked="" type="checkbox"/> v1 and v2c <input type="checkbox"/> v3
Community String	public	<input type="text" value="public"/>

Additional security may be added by configuring SNMP v3, allowing authentication and encryption. Each encryption type uses 128-bit encryption.

Setting Description	Current Settings	Update Settings
SNMP Version	v1 and v2c	<input type="checkbox"/> v1 and v2c <input checked="" type="checkbox"/> v3
Context	public	<input type="text" value="normal"/>
Username		<input type="text" value="username"/>
Authentication Type	None	<input type="checkbox"/> None <input checked="" type="checkbox"/> MD5 <input type="checkbox"/> SHA
Password		<input type="text" value="....."/>
Encryption Type	None	<input type="checkbox"/> None <input checked="" type="checkbox"/> DES <input type="checkbox"/> AES
Encryption Key		<input type="text" value="....."/>

SNMP Traps

SNMP traps may be configured to send notifications to a SNMP server.

Setting Description	Current Settings	Update Settings
Traps Enabled	Disabled	<input type="button" value="Disabled"/> <input type="button" value="Enabled"/>
Primary Target Host	trap.domain.com	<input type="text" value="trap1.domain.com"/>
Secondary Target Host	trap.domain.com	<input type="text" value="trap2.domain.com"/>
Trap Version	2c	<input type="button" value="1"/> <input type="button" value="2c"/>
Community String	public	<input type="text" value="public"/>
Heartbeat Freq (min)	2	<input type="text" value="2"/>

The EWS only supports SNMP v1 and v2c traps. Trap hosts may be entered as names or IP addresses.

The heartbeat frequency determines the frequency a trap is sent to let the SNMP server know the EWS is still alive and responding. Setting a frequency of 0 disables the heartbeat trap.

For traps to be send on a sensor, the following configuration is required:

- Traps need to be configured on the SNMP settings page
- SNMP checkbox to be selected on the relevant sensor
- A low or high threshold needs to be configured (excluding tripped breakers and digital inputs)

Name	Sensor	Lower	Upper	LED	Relay	SMTP	SNMP	Description
Voltage(V)	48.0	<input type="text" value="40.0"/>	<input type="text" value="56.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Current(A)	21.2	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Busbar(°C)	23.8	<input type="text"/>	<input type="text" value="60.0"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Core(°C)	30	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>

In the above example, a trap will be sent if the sensors value drops below 'Alarm Low', or exceeds 'Alarm High'.

Settings – System

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System

Change the EWS System Settings

Setting Description	Current Settings	Update Settings	
System Location	Location	<input type="text" value="Location"/>	<input type="button" value="Update"/>
System Contact		<input type="text" value="test@test.com"/>	<input type="button" value="Update"/>
Reboot		<input type="button" value="Reboot"/>	
Factory Reset		<input type="button" value="Factory Reset"/>	
Model	EWS01		
Serial	FFFE		

Name: ipdu104 Location: Location Firmware: 2.1.23 (GA)

System Location

The system location once set is displayed in the footer of each page on the EWS. It is also stored in the system section of SNMP.

Reboot

Reboot will reboot the EWS. This has no effect on the circuit breaker ability for the unit to power devices plugged into them.

Factory Reset

Performing a factory reset will wipe all user configurations and logs on the EWS. The DHCP settings on the EWS will be restored to the default of enabled. A factory reset can be performed in software and in hardware as follows:

Method	Factory Reset Instructions
Software	<ul style="list-style-type: none">• Press the factory reset button on the System page.
Hardware	<ul style="list-style-type: none">• Hold the two black buttons down below the OLED display• Press and release the red reset button• Continue holding the two black buttons for 12 seconds, then release them

Settings – Users

By default, there is one administrative account with access to the EWS. This account may not be removed or have its permissions reduced from Admin. It may have its username changed from admin.

Additional users may be created with 3 different roles:

- Admin – Full access to all pages
- Power User – All pages under the settings menu are unavailable
- User – All pages under the settings menu are unavailable and sensors are read only

User accounts may be added, edited or removed. When an account is edited, the password for the account needs to be re-entered.

Username	Role	Actions
admin	Admin	<input type="button" value="Edit"/>
poweruser	Power User	<input type="button" value="Edit"/> <input type="button" value="Remove"/>
user	User	<input type="button" value="Edit"/> <input type="button" value="Remove"/>

Recovering Access to an EWS

A factory reset may be necessary if access is lost to an EWS. Performing a factory reset will wipe all user configurations and logs on the EWS. The DHCP settings on the EWS will be restored to the default of enabled. A hardware factory reset can be performed as follows:

1. Hold the two black buttons down on the EWS
2. Press and release the red reset button
3. Continue holding the two black buttons for 12 seconds, then release them

Contact Us

For more information, you will find contact us and support information on the [AC&E website www.acande.com](https://www.acande.com). Additional installation guides, user guides and application notes for the IPDU and EWS products, see <https://www.acande.com/support/ipdu/>