



⚡ DC CHARGING MANAGEMENT PLATFORM

Joulepoint DC Charger HMI & Admin Console

Redesigned Kiosk, Service Workspace, Remote Support & Control Experience



Real-time Charging



Secure by Design



Operational Intelligence



Remote Support

CONNECTOR 1
Charging in progress

Charging in progress
We're delivering energy to your battery

ENERGY: 1.33 kWh
POWER: 17.6 kW
CURRENT: 53 A
VOLTAGE: 336 V
Initial SoC: 11%
Current SoC: 18%
Demand: 365 V / 53 A
Using home PLC 1
Open live session

CONNECTOR 2
Ready for next vehicle

Ready to start
Plug in your vehicle to begin

ENERGY: 0.00 kWh
POWER: 0.0 kW
CURRENT: 0 A
VOLTAGE: 0 V
Initial SoC: --
Current SoC: --
Demand: --
No power path active
Tap for connector details

>Hello.
Plug in to start charging.

1 Available 2 Idle

Session History Support

EN

CONNECTOR 1 SUMMARY

Completed session report with delivered energy, timing, SoC, identity, and stop outcome.

ENERGY: 12.93 kWh
DURATION: 57m 22s
BATTERY: START SOC 47%, END SOC 100%

METER: METER START 130163.24 kWh, METER STOP 130176.17 kWh, STARTED 05/06/2026, 23:56:06, ENDED 06/06/2026, 00:55:28

STOP OUTCOME: STOP REASON SO Normal

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

SYSTEM HEALTH: ALL SYSTEMS NOMINAL

- Controller ACTIVE
- CSMS CONNECTED
- PLC (2/2 healthy)
- Network ONLINE

OPERATIONS SNAPSHOT

Charging: 1 of 2 connectors	Connected: 2 plugged or charging	Shared Sessions: 0 using donor PLCs	Faults: 0 active connector faults	Requested: 60.0 kW requested power total	Assigned: 53.2 kW assigned power total
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UTILIZATION: OCCUPANCY 100%, CHARGING UTILIZATION 50%, SITE POWER 0.0 kW

SYSTEM: SERVICE active, RELEASE deploy-pl4b-20260515T2147c-dc43201b-e20-clean

NETWORK: PRIMARY DEVICE eth0, GATEWAY 192.168.150.1, ADDRESSES 192.168.150.100/24

QUICK ACTIONS: OPEN CONNECTORS, OPEN PLANNER

REMOTE SUPPORT TUNNEL

Optional, encrypted, peer-to-peer tunnel for vendor support and remote diagnostics.

Hostname: evse-a5c7f04791dd
Tailnet IPv4: 100.89.255.67
Tailnet IPv6: fd7a:115c:a1e0::b335:ff43
Tailnet: dikibhuyan@gmail.com
Stored key: tkey-auth-kuJ2GWH98841C...
Daemon: 1.96.4


DISCONNECT

LOGOUT (KEEP KEY)

FORGET KEY

Kiosk Home Dashboard

Dual-connector live charging overview at a glance.



DC CHARGER HMI

* ACTIVE

Updated 01:52:03

evse-scrby.local

CSMS CONNECTED
Connected to central system

6304903909

CHARGING
CurrentDemand

CONNECTOR 1

Charging in progress

Charging in progress Step 6 of 6

We're delivering energy to your battery

SAPSetupDiscoDetailPay-SelPayAuthParamCablePrePD-OnCurr

PD-OffWeldStop

ENERGY 1.33 kWh	POWER 17.6 kW
CURRENT 53 A	VOLTAGE 336 V
Initial SoC 11% <small>Session start</small>	Current SoC 18% <small>Live vehicle report</small>
Demand 365 V / 53 A <small>Delivery ready</small>	Gun Temp — <small>Temperature not reported</small>

Using home PLC 1
04m 38s

[Open live session](#) >

AVAILABLE
Idle

CONNECTOR 2

Ready for next vehicle

Ready to start Step 1 of 6

Plug in your vehicle to begin

SAPSetupDiscoDetailPay-SelPayAuthParamCablePrePD-OnCurr

PD-OffWeldStop

ENERGY 0.00 kWh	POWER 0.0 kW
CURRENT 0 A	VOLTAGE 0 V
Initial SoC — <small>Session start</small>	Current SoC — <small>Live vehicle report</small>
Demand — <small>none</small>	Gun Temp — <small>Temperature not reported</small>

No power path active
7h 30m

[Tap for connector details](#) >



● ACTIVE

DC CHARGER HMI

Updated 01:52:20

Home

🔒 evse-scrby.local

● CSMS CONNECTED
Connected to central system

6304903909

03

Connector 1 Live Session

Detailed live charging visibility for active sessions.



Real-time Charging

Live power, current, voltage and energy streaming from the active session.



Session Context

Monitor session timing, SOC, identity, and operational configuration.



Smart Allocation

Dynamic power allocation based on demand, limits and availability.



Remote Control

Take action instantly with session controls and support tools.

DRIVER KIOSK

CONNECTOR 1

Detailed live connector view with charging metrics, session timing, and module-sharing context.

CHARGING

CONNECTOR 1

Charging in progress

SESSION STATE

AUTH STATE

SHARING

LIVE CHAIN

PowerDelivery

Granted

Using home PLC 1

1

ENERGY

1.41 kWh

Delivered in the current live session

POWER

17.6 kW

Aggregated live connector power

CURRENT

53 A

Aggregated live connector current

VOLTAGE

336 V

Live connector voltage

SESSION CONTEXT

STARTED	06/06/2026, 01:47:26
ELAPSED	04m 54s
INITIAL SOC	11%
CURRENT SOC	18%
IDENTITY	RemoteStart
HLC STEP	CurrentDemandReq (7h 30m ago)
LIVE V/I/P SOURCE	Module telemetry
OCPP METER SOURCE	Dedicated meter / Estimated
FAULT	F0 None

STATE OF CHARGE



POWER ALLOCATION

OWNER PLC	PLC 1
REQUESTED	30.0 kW
OFFERED	56.0 kW
ALLOWED	30.0 kW
ASSIGNED	30.0 kW
OFFERED CHAIN	1 -> 2
BMS STALE	No

VEHICLE DEMAND

DEMAND VOLTAGE	365 V
DEMAND CURRENT	53 A
DEMAND POWER	19.4 kW
DEMAND STAGE	current_demand
DELIVERY READY	Yes
GUN TEMPERATURE	--

CONNECTOR NOTES

Charging is active. Power, current, voltage, and energy update from the live runtime stream.

STOP SESSION

LAST SESSION SUMMARY



DC CHARGER HMI

• ACTIVE

Updated 01:52:39

evse-scrby.local

Home

CSMS CONNECTED
Connected to central system

6304903909

DRIVER KIOSK

CONNECTOR 2

Detailed live connector view with charging metrics, session timing, and module-sharing context.

AVAILABLE

CONNECTOR 2

Ready for next vehicle

SESSION STATE

Unplugged

AUTH STATE

Unknown

SHARING

No power path active

LIVE CHAIN

None

ENERGY

0.00 kWh

Delivered in the current live session

POWER

0.0 kW

Aggregated live connector power

CURRENT

0 A

Aggregated live connector current

VOLTAGE

0 V

Live connector voltage

SESSION CONTEXT

STARTED	05/06/2026, 18:21:51
ELAPSED	7h 30m
INITIAL SOC	--
CURRENT SOC	--
IDENTITY	None
HLC STEP	--
LIVE V/I/P SOURCE	--
OCPM METER SOURCE	-- / unknown
FAULT	FO None

STATE OF CHARGE



CONNECTOR NOTES

Connector is idle and ready for the next vehicle.

LAST SESSION SUMMARY

POWER ALLOCATION

OWNER PLC	PLC 2
REQUESTED	0.0 kW
OFFERED	0.0 kW
ALLOWED	0.0 kW
ASSIGNED	0.0 kW
OFFERED CHAIN	--
BMS STALE	No

VEHICLE DEMAND

DEMAND VOLTAGE	--
DEMAND CURRENT	--
DEMAND POWER	--
DEMAND STAGE	none
DELIVERY READY	No
GUN TEMPERATURE	--

⚡ DC CHARGING MANAGEMENT PLATFORM

Connector 2 Ready View

Idle connector state with full operational context.



Real-time Charging



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Remote Support

Connector 1 Summary

⚡ ACTIVE

05 / 16

Completed-session reporting with clear outcome visibility.

⚡ ENERGY DELIVERED

12.93 kWh

Energy delivered in the completed session

🕒 DURATION

57m 22s

Full session duration

🔋 BATTERY

START SOC	47%
END SOC	100%

🕒 METER

METER START	130163.24 kWh
METER STOP	130176.17 kWh
STARTED	05/06/2026, 23:58:06
ENDED	06/06/2026, 00:55:28

👤 IDENTITY

SOURCE	RemoteStart
CREDENTIAL	--
RFID	--

🛡️ STOP OUTCOME

STOP REASON	SO Normal
FAULT	FO None

Connector 2 Summary

Clear post-session reporting for every completed charge.

ENERGY

5.84 kWh

Energy delivered in the completed session

DURATION

20m 29s

Full session duration

BATTERY

START SOC **70%**

END SOC **93%**

METER

METER START **91612.39 kWh**

METER STOP **91618.22 kWh**

STARTED **06/06/2026, 00:42:35**

ENDED **06/06/2026, 01:03:05**

IDENTITY

SOURCE **RemoteStart**

CREDENTIAL **--**

RFID **--**

STOP OUTCOME

STOP REASON **S0 Normal**

FAULT **F0 None**

Admin Sign-In

Secure service entry for authorized operators.



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SERVICE WORKSPACE

ADMIN SIGN-IN

Visible service entry for field operators on the kiosk.

SERVICE ACCESS

Press and hold the header logo for 5 seconds to open this page. Admin access signs out automatically after inactivity.

SERVICE PIN

Enter admin PIN

UNLOCK ADMIN

RETURN TO KIOSK

Admin Overview Console

System-wide health, utilization, and quick actions in one place.



Real-time Charging



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Remote Support



TSREDCOIPL2D2223036

ACTIVE

Updated 01:56:04

evse-scrby.local

Kiosk

CSMS CONNECTED
ocpp.stain.io:80

SIGN OUT

6304903909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

Overview

Connectors

Sessions

Planner

Faults

Config

Settings

Network

Tunnel

PLC

Logs

Maintenance

License

SYSTEM HEALTH

ALL SYSTEMS NOMINAL

- Controller** ACTIVE
Controller running and responsive.
- CSMS** CONNECTED
Connected to central system.
- PLC (2/2 healthy)** OK
2 of 2 PLCs healthy.
- Network** ONLINE
Online via eth0.

OPERATIONS SNAPSHOT

Charging

1

of 2 connectors

Connected

2

plugged or charging

Shared Sessions

0

using donor PLCs

Faults

0

active connector faults

Requested

60.0 kW

requested power total

Assigned

53.2 kW

assigned power total

UTILIZATION

OCCUPANCY	100%
CHARGING UTILIZATION	50%
SITE POWER	0.0 kW
LIVE SESSION ENERGY	2.33 kWh

SYSTEM

SERVICE	active
RELEASE	deploy-pi4b-20260515T2141Z-dc43201b-e2e-clean
CONTROL SOCKET	Healthy
PLAN VERSION	2862
CONFIG PATH	/opt/evse/config/charge_r.json
STATE PATH	/opt/evse/runtime/state/controller_state.json

NETWORK

PRIMARY DEVICE	eth0
GATEWAY	192.168.150.1
ADDRESSES	192.168.150.100/24
DNS	192.168.150.1

QUICK ACTIONS

OPEN CONNECTORS

OPEN PLANNER

OPEN FAULT CENTER

OPEN SESSION HISTORY

ALERTS

No active service alerts from the current runtime snapshot.

CONNECTOR FLEET

CHARGING

ENERGY	2.33 kWh
POWER	0.0 kW
CURRENT	0 A

Connector 1

VOLTAGE	360 V
STATE	PowerDelivery
SHARING	Using home PLC 1

OPEN CONNECTOR

CONNECTED

ENERGY	0.00 kWh
POWER	0.0 kW
CURRENT	0 A

Connector 2

VOLTAGE	0 V
STATE	Slac
SHARING	Using home PLC 2

OPEN CONNECTOR

Session Analytics & History

Live session visibility and historical charging records.



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DC CHARGER HMI

TSREDC0IPL2D2223036

ACTIVE

Updated 01:54:38

evse-scrby.local

Kiosk

CSMS CONNECTED
ocpp.statiq.in:80

SIGN OUT

6304903909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

- Overview
- Connectors
- Sessions**
- Planner
- Faults
- Config
- Settings
- Network
- Tunnel
- PLC
- Logs
- Maintenance
- License

SESSION ANALYTICS

ACTIVE SESSIONS	1
PLUGGED SESSIONS	1
COMPLETED SESSIONS	2
VISIBLE ROWS	2
VISIBLE ENERGY	18.76 kWh

ACTIVE SESSIONS

CONNECTOR ACTIONS

Connector 1

Charging

2.09 kWh

17.7 kW

07m 12s

[Open admin detail](#)

COMPLETED SESSIONS

REFRESH HISTORY

Showing 1-2 of 2 sessions

Rows 10

PREVIOUS

Page 1 of 1

NEXT

CONNECTOR	STARTED	ENDED	DURATION	METER START	METER STOP	ENERGY	SOC	SOURCE	RFID / CREDENTIAL	STOP	FAULT
2	06/06/2026, 00:42:35	06/06/2026, 01:03:05	20m 29s	91612.39 kWh	91618.22 kWh	5.84 kWh	70% -> 93%	RemoteStart	USER1020843	SO Normal	FO None
1	05/06/2026, 23:58:06	06/06/2026, 00:55:28	57m 22s	130163.24 kWh	130176.17 kWh	12.93 kWh	47% -> 100%	RemoteStart	USER1960222	SO Normal	FO None

Showing 1-2 of 2 sessions

Rows 10

PREVIOUS

Page 1 of 1

NEXT

Planner & Site Limits

Hot-reloadable power planning and allocation control.



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DC CHARGER HMI

ACTIVE

Updated 11:36:08

evse-scrby.local

Kiosk

CSMS CONNECTED
Connected to central system

[+] SIGN OUT

6304903909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

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SITE LIMITS

Hot-reloadable transformer / grid caps. Changes apply within ~50 ms — no restart needed. Overrides active (charger.json values shown below for reference).

Site limit (kW)	OCPP SmartCharging limit (kW)	Group power (kW per PLC chain)	Max groups per owner	
56	56	0	0	<input checked="" type="checkbox"/> Allow cross-PLC borrowing
Static: 60 kW	0 = no static cap; CSMS profiles still apply	Static: 0 kW	Donor chain depth from a single owner PLC	

SAVE
RELOAD
RESET TO CHARGER.JSON

CONNECTOR PLAN

Planner connector data is not available.

PLANNER ANALYTICS

Version	Requested	Offered	Allowed	Assigned	Shared Chains
2880	0.0 kW	0.0 kW	0.0 kW	0.0 kW	0
site-plan version	total requested by connectors	headroom advertised to active EVs	total planner allowance	total assigned by planner	connectors using donor chains

Offered Chains	BMS Stale
0	0
connectors with donor capacity offered	connectors with stale BMS

RECOMPUTE PLANNER

PLC ASSIGNMENTS

Showing 1-2 of 2 assignments

Rows 10
PREVIOUS
Page 1 of 1
NEXT

PLC	OWNER	ROLE	ENABLED	RELAY2	CONTRIBUTION	MODULES
1	--	idle	No	Open	0.0 kW	1
2	--	idle	No	Open	0.0 kW	2

Showing 1-2 of 2 assignments

Rows 10
PREVIOUS
Page 1 of 1
NEXT

Fault Center

Active faults, alerts, and error history in one service view.



Real-time Charging




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Remote Support



DC CHARGER HMI

ACTIVE

Updated 11:36:28

evse-szby.local

Kiosk

CSMS CONNECTED
Connected to central system

SIGN OUT

6304903909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

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Maintenance

FAULT CENTER

Faults

2

active fault records

Warnings

0

active warning records

Fault Codes

2

coded connector or PLC faults

Connector Faults

2

faulted connectors

PLC Issues

0

problem PLCs

ACTIVE FAULTS

Connector 1 fault

F1 EmergencyStop: emergency_stop

CLEAR FAULT
OPEN CONNECTOR

Connector 2 fault

F1 EmergencyStop: emergency_stop

CLEAR FAULT
OPEN CONNECTOR

ACTIVE FAULT CODES

REFRESH HISTORY

SOURCE	CODE	LABEL	REASON	STATE
Connector 1	F1	EmergencyStop	emergency_stop	Fault
Connector 2	F1	EmergencyStop	emergency_stop	Fault

WARNINGS

No active warnings are reported in the current runtime snapshot.

ERROR HISTORY

REFRESH HISTORY





TIME	SEVERITY	SOURCE	EVENT	CODE	DETAIL
06/06/2026, 10:03:47	warning	Connector 1	Connector 1 recovered	--	stop_complete
06/06/2026, 10:03:47	warning	Connector 2	Connector 2 recovered	--	stop_complete
06/06/2026, 10:03:47	fault	PLC 1	PLC 1 emergency stop	F1 EmergencyStop	Emergency stop input became active.
06/06/2026, 10:03:47	warning	Connector 1	Connector 1 stop requested	--	fault
06/06/2026, 10:03:47	fault	Connector 1	Connector 1 fault	--	emergency_stop
06/06/2026, 10:03:47	warning	Connector 2	Connector 2 stop requested	--	fault


Showing 1-9 of 9 events

Rows 10 PREVIOUS Page 1 of 1 NEXT

Configuration Editor

Deep charger configuration with validation and protocol controls.

-  Real-time Charging
-  Secure by Design
-  Operational Intelligence
-  Remote Support



TSREDC01PL20223036 ACTIVE

DC CHARGER HMI

Updated 11:36:08

evse-scrby.local

Kiosk

CSMS CONNECTED
Connected to central system

SIGN OUT

63049030909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

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CONFIGURATION EDITOR

Basic
Controls/Log
OCPP Live Config

This mode allows you to configure the control box parameters. Changes to values require reboot to apply. Invalid configurations may cause charger malfunction or impaired security. Verify settings using configuration checker before saving.

IDENTITY

Set unique identity of this device on the network.

Controller ID TSREDC01PL20223036

Unique identifier for this control box.

HARDWARE

Configure the hardware limits, sensors, and sampling parameters.

Hardware variant 2 Gun

Maximum charging connectors.

Max charge guns 1

Maximum power per gun.

Max power per gun 60 kW

Total nominal power, charger 60 kW

Total rated peak power, charger 100 kW

Latch modular power settings true

MODULES & PROTOCOLS

Protocol and module configuration for PLC, meters, and communication.

Option Use Option 3 box

Select modules in use for this control box.

PLC software IoTeX (Catena-X)

Vendor for PLC communications.

CAN interface can0

Select CAN interface to use.

Table tagger mode AC input mode-1

Enable table usage on power modules.

MOBILE THING (CONNECTED)

Configure mobile broadband or Wi-Fi connectivity for remote operations.

POP-PLC (MOBILE & ADMISSION CONNECTED)

Set POP context for mobile broadband connection. Must be configured correctly for PLC data routing.

POP switched On

POP provider vpn.ion2020.co.at@3.co.at:vpn.fma.ie/PVL

Secured Always VPN

APN mode Static

Policy user_PVL

Ping host icmp.pb

Connect / Upload fault enable 2

Connect / Upload fault retries 1

Connection lost timeout 120

SD charging stop No

Max retries count to reset 10

OCPP POP PROFILE Default (service.vodafone.live.vod.)

ENERGY METER (CONNECTED)

Configure energy meter parameters.

Meter enabled On

Meter vendor eastron:SDM630-MOEBUS-DLMS-TCP

Serial port baudrate 9600

Parity Even (P1)

Stop bits 1 stopbit

Current / Modbus start 2

Current / Modbus count 2

Connection timeout 10

Sim charging stop No

Max offline session allowed 120

OCPP ENERGY METER Default (report only active import/export)

PLANNER

Configure power planner and allocation limits.

Site limit 60 kW

Connector limit On

Max connector limit 60.00 kW

AUTHORIZATION

Set authorization and access control preferences.

Auto charge identity source OCPP Owner (RFID & PIN Code)

Allow autocharge offline Yes

Sparrow PLC authentication Appas (recommended)

OCPP / CSMS

OCPP backend and communication settings.

OCPP enabled Enabled

Charge point ID TSREDC01PL20223036

Central system URL www.hic.joulepoint.com:643

Security profile OCSP - No SSL Cert (OCPP 2.0.1 / 2.0.3)

Heartbeat interval 30

Connection timeout 10

Sim - Oncharging reserved 120

OCPP & CONNECTIVITY RESILIENCE

Configure charger diagnostics and resiliency for network outages.

Offline charging rls Resume on auth & heartbeat/NFC & offlineAuth

Max OCPP heartbeat down allowed offline time (mins) Follow offlinePolicy

CSMS reconnect retries 300

Offline session inactivity stop Enable

Offline top-up reservation 60

Offline max - pre reserved energy 90

ACTIONS

Validate, reload, or apply changes to the control box configuration. Reboot may be required for changes to take effect.

VALIDATE
APPLY

VALIDATION OUTPUT

Run configuration validation to check for errors and conflicts.

Status: ✔ No issues found

PLC TRANSPORT (ADVANCED)

Low-level PLC transport configuration. Leave unchanged unless instructed by Joulepoint support. Incorrect settings may affect PLC communication.

Leave settings at defaults unless a custom adjustment has been provided.

Security & Branding

Branding, PIN control, 2FA, and HTTPS security settings.



Real-time Charging




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Remote Support



DC CHARGER HMI

ACTIVE

Updated 11:36:40

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Kiosk

CSMS CONNECTED
Connected to central system

SIGN OUT

6304903909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

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BRANDING

These values drive the top-bar logo and support phone shown across the kiosk and admin views.

LOGO URL

Currently using an uploaded file. Clear this field and Save to fall back to the brand-text lookup, or replace with a URL.


SAVE BRANDING

OR UPLOAD A LOGO FILE

CHOOSE FILE No file chosen

PNG, JPEG, SVG, WebP, or GIF — up to 1.5 MB. Saved on the device, served at /branding/logo.<ext>.

LOGO PREVIEW



SUPPORT PHONE

REMOVE UPLOADED FILE

CHANGE PIN

The admin session is invalidated immediately after a successful PIN change.

CURRENT PIN

NEW PIN

CONFIRM PIN

UPDATE PIN

ALLOWED FORMAT

Digits only

LENGTH

4–12 digits

TWO-FACTOR AUTHENTICATION

Two-factor authentication adds a one-time code from an authenticator app (Google Authenticator, Microsoft Authenticator, 1Password, Authy) on top of the admin PIN. We strongly recommend enabling it on any charger reachable over the LAN or Tailscale.

ENABLE TWO-FACTOR

TLS / HTTPS

HTTPS is enabled on the LAN via Caddy with a per-device internal CA. Install this root certificate on any phone or laptop you use to admin this charger and you'll see a green padlock at https://evse-scrby.local/.





HTTPS URL	https://evse-scrby.local/
CA PATH	/var/lib/evse/pki/ca-cert.pem
CERT SIZE	627 bytes
LAST REFRESHED	06/06/2026, 06:23:56
VALID UNTIL	15/03/2036, 04:09:36


DOWNLOAD DEVICE CA

► How to install the CA on your devices

Network Setup

On-device network status, Wi-Fi scanning, and connectivity control.

-  Real-time Charging
-  Secure by Design
-  Operational Intelligence
-  Remote Support



DC CHARGER HMI

ACTIVE

Updated 11:36:59

evse-scrby.local

Kiosk

CSMS CONNECTED
Connected to central system

[+] SIGN OUT

6304903909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

Overview
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CURRENT NETWORK

CAPTURE DIAGNOSTIC

WI-FI ENABLED	Yes
PRIMARY DEVICE	eth0
GATEWAY	192.168.150.1
ADDRESSES	192.168.150.100/24

FORGET WIRED CONNECTION 1

FORGET LO

CONNECT WI-FI

SSID

PASSWORD

SCAN
CONNECT

SCAN RESULTS

Run a scan to list nearby networks.

Remote Support Tunnel

Secure encrypted remote access for diagnostics and support.



Real-time Charging



Secure by Design



Operational Intelligence



Remote Support

The screenshot shows the 'ADMIN CONSOLE' for a 'DC CHARGER HMI'. At the top, there is a status bar with a logo, 'ACTIVE' status, 'Updated 11:37:08', a user 'evse-scrby.local', a 'Kiosk' mode indicator, and a 'CSMS CONNECTED' status with a 'SIGN OUT' button. Below this is a navigation menu with tabs for Overview, Connectors, Sessions, Planner, Faults, Config, Settings, Network, Tunnel (selected), PLC, Maintenance, and License. The main content area is titled 'REMOTE SUPPORT TUNNEL' and includes a 'REFRESH' button. It displays the following information: 'CONNECTED' status, Hostname: evse-a5c7f04791dd, Tailnet IPv4: 100.89.255.67, Tailnet IPv6: fd7a:115c:a1e0::b335:ff43, Tailnet: dikibhuyan@gmail.com, Stored key: tskey-auth-KU2GWH988411CNTRL-2aqksncAEC...119868d6478cf687, and Daemon: 1.96.4. At the bottom, there are three buttons: 'DISCONNECT', 'LOGOUT (KEEP KEY)', and 'FORGET KEY'.

PLC Management

PLC discovery, configuration, licensing, and firmware control.

- Real-time Charging
- Secure by Design
- Operational Intelligence
- Remote Support



DC CHARGER HMI

TSREDC0IP12Q3223096 ACTIVE

Updated 11:37:22

evse-scrtyb.local

Kiosk

CSMS CONNECTED
connected to central system

SIGN OUT

63049030909

SERVICE WORKSPACE

ADMIN CONSOLE

Operator workspace for service checks, network actions, PLC inspection, security settings, configuration, and maintenance.

- Overview
- Connectors
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- Tunnel
- PLC**
- Logs
- Maintenance
- License

PLC USB DISCOVERY

ESP32 based PLC boards expose themselves under /dev/serial/by-id/ as usb-<cp-serial>-<USB_if>-<serial_debug_unit>-<id> etc. The MAC is per-device, so a fresh flash to a charger whose PLCs have different MACs from the previous build will fail to bring up the controller unit 1 plcTransport.start100Port is required. Use this panel to detect and apply.

TRANSPORT KIND	multi_serial
AUTO-DISCOVERY	yes
DETECTED (USB)	2 devices
CONFIGURED (CHARGERS.JSON)	2 paths
MATCHED	✓ in sync

Detected USB devices

```
/dev/serial/by-id/usb-Espressif_USB_JTAG_serial_debug_unit_BF:0F:13:71:FF:C0:r00
/dev/serial/by-id/usb-Espressif_USB_JTAG_serial_debug_unit_BF:0F:13:72:9A:AC:r00
```

Configured paths in chargers.json

```
/dev/serial/by-id/usb-Espressif_USB_JTAG_serial_debug_unit_BF:0F:13:71:FF:C0:r00
/dev/serial/by-id/usb-Espressif_USB_JTAG_serial_debug_unit_BF:0F:13:72:9A:AC:r00
```

PLC ACCESS POLICY

PLC runtime and assignment state are visible here. Persistent PLC side configuration still belongs on each PLC via iManager.

PLC 1	HEALTHY	PLC 2	HEALTHY
CONNECTOR	1	CONNECTOR	2
ASSIGNMENT ROLE	idle	ASSIGNMENT ROLE	idle
RELAY 1	Open	RELAY 1	Open
RELAY 2	Open	RELAY 2	Open
DELIVERED POWER	0.0 kW	DELIVERED POWER	0.0 kW
METER ENERGY	120182.25 kWh	METER ENERGY	91635.54 kWh
FAULT	None	FAULT	None

PLC IPV5 CONFIGURATION (CURRENT VALUES)

This panel identifies each PLC's firmware base and then fetches IP, PLC IDs (port 1 win, 2 both) uploaded from proxy [SERVICE] STATUS.message, 4 «station(s) identify station multiple) and multi-end(did del del the firmware), WiFi, app list specific, AVG.Admin.NORCE connect(s) hang for module kinds — see notes under each unit.

PLC 1	PLC 2
PLC ID (uuid): 1	PLC ID (uuid): 2
PLC ID (firmware): 1	PLC ID (firmware): 2
Connector ID: 1	Connector ID: 2
Controller ID: 7	Controller ID: 4
Module Address: 0xE11	Module Address: 0xE2
Local Encap: 3	Local Encap: 2
Module ID: PL1L_KKL_01	Module ID: PL2L_KKL_02
Mode: external_controller (1)	Mode: external_controller (1)
LCD count: 2	LCD count: 2
Alias.Admin.IPVS.CONF: 2C dB (3N45)	Alias.Admin.IPVS.CONF: 2C dB (3N45)

PLC LICENSE

Each PLC runs its own device license also (family plc_1, trusted), separate from the controller license. Activate a vendor-embedded code per PLC below — codes are minted from the CSMS vendor site via the controller, so a single generator reuses both products.

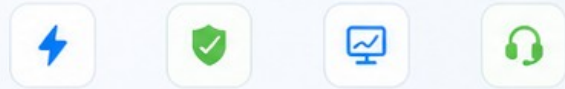
PLC 1 license	PLC 2 license
ACTIVE PLC_FIRMWARE	ACTIVE PLC_FIRMWARE
Vendor code: EDPc*****	Vendor code: 7FBD*****
License: c1License(>B.1.0)	License: c1License(>B.1.0)
PLC 1 DEVICE FINGERPRINT AV2135M9SH37PMS4SJV7DF8SBAFFYHOKTCN13QKXT9REKTRB8BV9EG	PLC 2 DEVICE FINGERPRINT BQKXAT7SXBKZTFYRACQCCAPAFYGC86GDC2554ATZF2R0NCOQWTT26

Send this fingerprint to your vendor contact. They mint a 15-character code for family plc_1. Firmware bound to this PLC. The PLC shares the controller's vendor salt, so one generator issues codes for both.


Send this fingerprint to your vendor contact. They mint a 15-character code for family plc_1. Firmware bound to this PLC. The PLC shares the controller's vendor salt, so one generator issues codes for both.

Logs & Diagnostics

Fast troubleshooting through service logs and audit diagnostics.



Real-time Charging Secure by Design Operational Intelligence Remote Support



DC CHARGER HMI

● **ACTIVE**

Updated 11:37:45

🔒 evse-scrby.local

Kiosk

● **CSMS CONNECTED**
Connected to central system

➔ SIGN OUT

6304903909

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LOGS

DOWNLOAD ALL (.TAR.GZ)
DOWNLOAD SELECTED
REFRESH

The viewer shows the most recent 50 lines per source for browser-friendly scrolling. Use **Download Selected** to grab the FULL source file as plain text, or **Download All** to get every source — including journal units, watchdog stdout, journal/event files, and the audit log — bundled into a single .tar.gz with a manifest.txt and a device-summary.json. The bundle is what to send when contacting support.

Service Journal (evse-controller.service) (3)

HMI Server (evse-hmi.service) (400)

Kiosk Display (evse-kiosk.service) (35)

Tailscale (tailscaled.service) (400)

mDNS (avahi-daemon.service) (17)

TLS Terminator (caddy.service) (97)

Audit Log (admin actions) (400)

Controller stdout — controllerd-20260603T151137.log (400)

Controller stdout — controllerd-20260603T161615.log (400)

Controller stdout — controllerd-20260604T115851.log (400)

Controller stdout — controllerd-20260605T135021.log (400)

events.jsonl (400)

Showing 1-3 of 3 lines Rows 50 PREVIOUS Page 1 of 1 NEXT

LINE	MESSAGE
1	Jun 05 13:50:20 evse-scrby systemd[1]: Started evse-controller.service - EVSE Controller.
2	Jun 05 13:50:21 evse-scrby evse_system.sh[723]: [2026-06-05T13:50:21+0100] watchdog start binary=/opt/evse/current/controller/build-libcopp/controllerd config=/opt/evse/config/charger.json tickMs=50
3	Jun 05 13:50:21 evse-scrby evse_system.sh[785]: [2026-06-05T13:50:21+0100] launching controller log=/opt/evse/runtime/watchdog/controllerd-20260605T135021.log

Showing 1-3 of 3 lines Rows 50 PREVIOUS Page 1 of 1 NEXT

DIAGNOSTICS

Quick references for what the device captures, where it lives, and how it rotates. Use the Download buttons above to grab the actual content.

PLC FAILURE EVENTS

FRAME-LEVEL PLC LOGGING **Not enabled today. Adding a hexdump around each transport read/write is a controller-side change scheduled for a future build; the controller-rebuild step is the gating dependency.**

CONTROLLER LOG ROTATION **Watchdog keeps the 30 most recent controllerd-*.log files, plus a 256 KB summary log with one 1 backup. Total cap ≈ 1 MB. Override via EVSE_CONTROLLER_LOG_MAX_FILES / EVSE_CONTROLLER_SUMMARY_MAX_BYTES on the evse-controller.service.**

JOURNAL RETENTION (SYSTEMD) **systemd-journald defaults — typically capped to 10% of /var. Use the Download All button above to capture everything within that window.**

HMI AUDIT LOG **JSONL of every admin action (login, MFA changes, settings, license activation). Lives at /opt/evse/runtime/audit/audit.log. Append-only.**

BACKUP RETENTION **Per-prefix cap of 10 backups, age cap of 30 days. Each settings-write spawns one backup directory under /opt/evse/runtime/hmi-backups.**

▶ **What to send when contacting support**

Captured by the controller via std::cerr → controllerd-*.log

Maintenance Health

Runtime health checks and controlled recovery actions.



Real-time Charging



Secure by Design



Operational Intelligence



Remote Support



• ACTIVE

Updated 11:37:59

evse-scrby.local

Kiosk

CSMS CONNECTED
Connected to central system

➔ SIGN OUT

6304903909

DC CHARGER HMI

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HEALTH

OK	true
SERVICESTATE	active
VALIDATEBINARYEXISTS	true
CONTROLCKETEXISTS	true
STATEFILEEXISTS	true

▼ Raw health payload

```
{
  "ok": true,
  "serviceState": "active",
  "validateBinaryExists": true,
  "controlSocketExists": true,
  "stateFileExists": true
}
```

ACTIONS

Use planner recompute for runtime recalculation and controller restart only when normal service recovery cannot be achieved from the kiosk or backend.

🔄 REFRESH HEALTH


📊 RECOMPUTE PLANNER

🔌 RESTART CONTROLLER

License Activation

Offline device-bound license workflow for secure activation.

- Real-time Charging
- Secure by Design
- Operational Intelligence
- Remote Support



TSREDCO IPL2D2223036 ACTIVE

DC CHARGER HMI

Updated 01:56:39

evse-scrby.local Kiosk

CSMS CONNECTED
ocpp.staqin.in:80

SIGN OUT

6304903909

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LICENSE ACTIVATION REFRESH

ACTIVE

license verified

Activated: 08/05/2026, 16:44:39

Stored code: **6C8SA-****-******

Code file: /opt/evse/data/license.code

DEVICE FINGERPRINT (LINUX)

MQ3Z-0HWH-VQ3W-F58R-0151-JF04-7WP5-6E22-RBBJ-R4Y6-AEQZ-17FF-0D7G

Send this fingerprint to your vendor support contact. They will mint a 15-character activation code bound to this exact device. Codes for other devices will be rejected.

COPY FINGERPRINT

ENTER ACTIVATION CODE

Paste the code your vendor sent.
Format XXXXX-XXXXX-XXXXX (15 characters; case-insensitive; hyphens optional).

ACTIVATION CODE

XXXXX-XXXXX-XXXXX

ACTIVATE

REMOVE LICENSE

HOW ACTIVATION WORKS

1. Read the device fingerprint above (it's stable per device – won't change between reboots).
2. Email or phone it to your vendor support contact.
3. Vendor mints a code bound to this exact device using their private salt.
4. Paste the code into the form on the left → press Activate.
5. Status flips to *Active*; the controller honors the license going forward.

The activation flow is fully offline – no internet required after the human relay step. The same library (cb license) runs in the controller and the PLC firmware, so codes minted for this device do not validate on any other device, even with the same vendor salt.