

# EVBox Troniq 50

fast charging solution

EVBOX















50 kW

Charges up to 125 km in just 30 minutes

Flexible architecture and universally compatible in every space and use case

Made to last with auto-retractable cables, high quality power electronic components, and more

Consumes power efficiently with smart queuing and battery storage options

-  50 kW fast charging capacity
-  Flexible architecture
-  Tariff settings
-  Universally compatible
-  Roaming
-  Utility power cabinet
-  Auto-retractable cables
-  Easy transportation, installation and maintenance
-  Advanced cooling and heating system
-  Remote maintenance
-  3-year warranty
-  Smart queuing
-  Color touchscreen with 4 languages
-  Optional battery storage

[evbox.com](https://evbox.com)



# Product portfolio



## EVBox Troniq 50

- Works as a standalone charger or as a EVBox Troniq Power Unit (PU)
- AC & DC charging connectors are included in the housing
- Can charge AC and DC simultaneously
- Has an AC / DC converter
- Includes AC MID meter
- Has independent AC and DC electrical protections



## Optional: EVBox Troniq User Unit 120 A (UU)

- Must be connected to a EVBox Troniq 50
- AC & DC charging connectors are included in the housing
- Can charge AC and DC simultaneously
- Does not have an AC / DC converter
- Both PU and UU do not include AC MID meter



# Product combinations

## EVBox Troniq 50 Standalone\*

- Ideal for places that allowing short parking times (around 30 min.)
- Has the biggest customization surface
- Requires minimum installation work



## (EVBox Troniq 50 + 1 x EVBox Troniq User Unit 120 A)\*\*

- Ideal combination for longer parking times (>1 hour)
- Allows for easy parking and plug handling
- More connectors are available
- If a connector has an error, the user has a second option, enabling a continuous service
- Smart queuing for AC and DC can be used



\* When only 1 car is connected, charger provides the maximum required power, when 2 cars are connected (one in AC and another in DC) the charger splits the maximum output power between 2 cars. \*\* Only 1 DC car can be charged at one time, even though there is more than one DC connector. Queuing is available in AC and CHAdeMO. Maximum 2 User Unit can be used per EVBox Troniq 50.

# General specifications



## Charging modes

**Mode 4 (DC charging)**

**Mode 3 (AC charging)**

**Mode 2 (AC charging)**

CHAdEMO up to 500 V / 120 A; CCS2 up to 500 V / 120 A

Up to 43 kW / 63 A or limited up to 22 kW / 32 A

Up to 2.3 kW / 10 A

## Connector type

**Mode 4**

**Mode 3**

**Mode 2**

JEVS G105 (CHAdEMO), CCS2

Type 2 attached cable (43 kW), Type 2 socket (22 kW)

Type E/F socket

## Cable length

**Mode 4**

**Mode 3**

**Mode 2**

4 m with auto-retractable cable

4 m with auto-retractable cable

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## Structure and physical properties

**Enclosure material**

**Enclosure ratings**

**Operating temperature**

**Storage temperature**

**Operating humidity**

**Enclosure fire ratings**

**Cooling**

**Mounting method**

**Maximum installation height**

Galvanized steel (structure), aluminum (casing), stainless steel (feet)

IP54 / IK10

-30°C to +50°C

-40°C to +70°C

5% to 95% non-condensing

M3 (NF P 92-501)

Forced ventilation

Floor / Ground (recommended with the optional clamping-sealing kit)

< 2000 m

## Dimension (W x H x D) and weight\*

**EVBox Troniq 50**

**EVBox Troniq User Unit 120 A**

765 x 1920 x 465 mm / 340 kg (Mono-standard)

820 x 1920 x 465 mm / 345 kg (Bi-standard)

920 x 1920 x 465 mm / 350 kg (Tri-standard)

331 x 1895 x 467 mm / 85 kg (Mono-standard)

421 x 1895 x 467 mm / 90 kg (Bi-standard)

513 x 1895 x 467 mm / 95 kg (Tri-standard)

## Connectivity

**Authorization**

**Status indication / HMI**

**Communication standard**

**Communication protocol**

**Positioning**

RFID/NFC (ISO 14443, ISO 18092, ISO 15693, ISO 18000-3, Calypso, Mifare

Ultralight C, -Classic, -Desfire)

2 beacon RGB LED Indicators / 7" anti-vandalism LCD touch screen

GPRS/3G modem and Ethernet

OCPP 1.5 S and 1.6 J

GPS

## Certifications

CE, EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU, EN/

IEC 61851-1, EN/IEC 61851-21-2, EN/IEC 61851-22, EN/IEC 61851-23, DIN

70121, ISO15118, CHAdEMO, EV/ZE-Ready

\*The weight can be increased depending of the battery modules installed. (+ 45 kg 2 modules; + 55 kg 3 modules; + 85 kg 6 modules)

# Electrical properties

EVBox Troniq 50



## AC input

<b>Voltage range</b>	400 VAC +/- 10%
<b>Number of phases</b>	3 P + N + PE
<b>Frequency</b>	50 Hz
<b>Input rating</b>	54 kVA (36 kVA with battery storage)
<b>Nominal input current</b>	77 A (52 A with battery storage)
<b>Maximal input current</b>	87 A (60 A with battery storage)
<b>Power factor</b>	> 0,99
<b>Efficiency</b>	95%
<b>Grounding system</b>	IT, TT or TN-S
<b>AC MID Meter</b>	Yes (except with User Unit option)
<b>Stand-by power consumption</b>	100 W

## DC output

<b>Output power</b>	50 kW
<b>Output voltage range</b>	50 VDC – 500 VDC
<b>Output current range</b>	1 A – 120 A

## AC output (mode 3)

<b>Output power</b>	43 kW with attached cable / 22 kW with socket outlet
<b>Output voltage range</b>	400 VAC +/- 10%
<b>Maximum output current</b>	63 A with attached cable / 32 A with socket outlet

## AC output (mode 2)

<b>Output power</b>	2.3 kW
<b>Output voltage range</b>	230 VAC +/- 10%
<b>Maximum output current</b>	10 A

## Electrical protections

**Internal electrical protections** RCBO 30 mA Type A, RCD 30 mA Type A + 6 mA detection, MCB curve C/D  
**Required circuit breaker upstream** MCBB Curve D, 120 A & RCD 300 mA, Type A, HI, (S)

Models	CHA	CCS	CCS + CHA	CCS + CHA + T2 CABLE	CCS + CHA + T2 SOCKET
<b>Required power supply capacity</b>	54 kVA	54 kVA	54 kVA	54 kVA	54 kVA
<b>Nominal AC input current</b>	77 A	77 A	77 A	77 A	77 A
<b>Maximum output power</b>	DC: 50 kW	DC: 50 kW	DC: 50 kW	DC: 50 kW AC: 43 kW	DC: 50 kW AC: 22 kW
<b>Maximum output current</b>	DC: 120 A	DC: 120 A	DC: 120 A	DC: 120 A AC: 63 A	DC: 120 A AC: 32 A
<b>Output voltage range</b>	DC: 50 - 500 V	DC: 50 - 500 V	DC: 50 - 500 V	DC: 50 - 500 V	DC: 50 - 500 V
<b>Number of plugs</b>	1	1	2	3	3
<b>Connections</b>	JEVS G105	CCS2	CCS2 - JEVS G105	CCS2 - JEVS G105 Type 2 cable	CCS2 - JEVS G105 Type 2 socket
<b>EVBox Troniq 50</b>	✓	✓	✓	✓	✓
<b>EVBox Troniq 50 + 1 x UU</b>	✓	✓	✓	✓	✓

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