

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://www.evbox.com)



Product portfolio



EVBox Troniq 50

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



EVBox Troniq User Unit 125 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
- Includes only an AC controller



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 125 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)	CHAdeMO; CCS2 up to 500 V / 120 A
Mode 3 (AC charging)	Up to 43 kW / 63 A or limited up to 22 kW / 32 A
Mode 2 (AC charging)	Up to 2.3 kW / 10 A

Connector type

Mode 4	JEVS G105 (CHAdeMO), CCS2
Mode 3	Type 2 attached cable (43 kW), Type 2 socket (22 kW)
Mode 2	Type E/F socket

Cable length

Mode 4	3.95 m with auto-retractable cable
Mode 3	3.95 m with auto-retractable cable
Mode 2	--

Structure and physical properties

Enclosure material	Galvanized steel (structure), aluminum (casing), stainless steel (feet)
Enclosure ratings	IP54 / IK10
Ambient temperature	-30°C to +50°C
Storage temperature	-40°C to +70°C
Operating humidity	5% to 95% non-condensing
Enclosure fire ratings	M3 (NF P 92-501)
Cooling	Forced ventilation
Mounting method	Floor / Ground (recommended with the optional clamping-sealing kit)
Maximum installation height	< 2000 m

Dimension (W x H x D) and weight*

EVBox Troniq 50	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)
EVBox Troniq User Unit 125 A	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	RFID/NFC (ISO 14443, ISO 18092, ISO 15693, ISO 18000-3, Calypso, Mifare Ultralight C, -Classic, -Desfire)
Status indication / HMI	2 beacon RGB LED Indicators / 7" anti-vandalism LCD touch screen
Communication standard	GPRS/3G modem and Ethernet
Communication protocol	OCPP 1.5 S and 1.6 J
Positioning	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

Voltage range	400 VAC +/- 10%
Number of phases	3 P + N + PE
Frequency	50 Hz
Required power supply capacity	54 kVA (36 kVA with battery storage)
Nominal input current	77 A (60 A with battery storage)
Power factor	> 0.99
Efficiency	95%
Grounding system	IT, TT or TN-S
Stand-by power consumption	100 W + 40 W

DC output

Output power	50 kW
Output voltage range	50 VDC – 500 VDC
Output current range	1 A – 120 A

AC output (mode 3)

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

AC output (mode 2)

Output power	2.3 kW
Output voltage range	230 VAC +/- 10%
Maximum output current	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	MCB Curve D, 100 A & RCD 300 mA, Type A, HI, (S)

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

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