# **EVBox Troniq 50**



# fast charging solution

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





#### evbox.com

# Product portfolio

# **EVB**©X

#### **EVBox Tronig 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 125 A (UU)

- Must be connected to a EVBox Tronig 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 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



<sup>\*</sup> 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 FVBvG Troniq 50.

### General specifications



#### Charging modes

Mode 4 (DC charging) CHAdeMO up to 500 V / 120 A; CCS2 up to 500 V / 125 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 Operating temperature -30°C to +50°C -40°C to +70°C Storage temperature Operating humidity 5% to 95% non-condensing **Enclosure fire ratings** M3 (NF P 92-501) Forced ventilation Cooling Mounting method Floor / Ground (recommended with the optional clamping-sealing kit)

< 2000 m

Maximum installation height

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

765 x 1920 x 465 mm / 340 kg (Mono-standard) **EVBox Troniq 50** 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)

#### Connectivity

#### Authorization

Status indication / HMI Communication standard Communication protocol Positioning

Certifications

#### 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

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

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

<sup>\*</sup>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





#### **AC input**

400 VAC +/- 10% Voltage range Number of phases 3P + N + PEFrequency 50 Hz 54 kVA (36 kVA with battery storage) Input rating Nominal input current 77 A (52 A with battery storage) 87 A (60 A with battery storage)

Maximal input current Power factor > 0.99 **Efficiency** 95% Grounding system IT, TT or TN-S

AC MID Meter Yes (except with User Unit option) Stand-by power consumption

100 W

#### DC output

50 kW Output power 50 VDC - 500 VDC Output voltage range 1 A - 125 A Output current range

#### 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)

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

#### **Electrical protections**

Internal electrical protections Required circuit breaker upstream RCBO 30 mA Type A, RCD 30 mA Type A + 6 mA detection, MCB curve C/D MCB Curve D, 100 A & RCD 300 mA, Type A, HI, (S)

Models	СНА	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: 125 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 \
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
	<b>(5)</b>		20		200
EVBox Troniq 50	~	~	~	~	~
EVBox Tronig 50 + 1 x UU	~	~	~	<b>✓</b>	~

Copyright © 2019 EVBox Manufacturing B.V. EVBox® and the EVBox logo are registered trademarks. All rights reserved. EVBox has compiled this document to the best of its knowledge but does not warrant that all information provided is error-free; EVBox does not accept liability in that respect. All specifications are approximates only. The limited warranty conditions are stated in the applicable EVBox general terms and conditions. EVBP\_DC50\_EN\_072019 © EVBox Manufacturing B.V.