

# ZEFNET Movable Charger

**The ZEFNET Movable Charger is the premiere stand-alone, mobile solution for fast DC charging of all types of electric vehicles.**

The Movable Charger can be used anywhere: events, bus & truck depots, logistics centers, car service shops, and other locations where fast charging is needed.

The Movable Charger can have one or two DC charging outputs, with CCS1 and CHAdeMo as the standard options. The available charging power is automatically distributed between the charging outputs.

There are two output voltage levels: 500 VDC and 800 VDC.



Power range

Up to **50** kW

Number of outputs

**1-2**



- 1 7" touch screen display
- 2 RFID reader (ISO 14443A)
- 3 Vehicle connectors and holders
- 4 Charging status indication LEDs
- 5 Removable wheels
- 6 Mounting pad



**Movable Charger for easy use  
wherever needed**



**Plug & play, easy to  
commission & use**



**On-screen QR code for  
following the charging status  
on your mobile phone**



**Removable wheels for fixed  
installation**



**Stand-alone charging  
system**



**Advanced charging control  
and customization with  
ZEFNET Software**

## Product code guide:

**T800•P40•UU•7•A•S•L•C0**  
**ZEFNET\_KP\_T500\_CCS2\_50**

500V Movable Charger • 50 kW charging power • 2  
 x CCS1 vehicle connector • charging cable length 23 ft.

- nominal charging cable current 80 A • standard user interface
- ETL certification

Item	Code	Description
Product type	T500	ZEFNET Movable Charger 500 V
	T800	ZEFNET Movable Charger 800 V
Charging power	50	50 kW at nominal voltage*
Vehicle connector type	Chad	CHAdEMO
	CCS	CCS1
	CCS2	2 x CCS1
	CCS-Chad	CCS1 & CHAdEMO
Charging cable length	5	16.4 ft. (Standard)
	7	23 ft. (Optional)
Nominal charging cable current	A	80 A (CCS1)
	B	125 A (CHAdEMO), 150 A (CCS1)
Certification	L	ETL-approved product

\* 40 kW at input nominal voltage <440 VAC

## General electrical specifications

Grid connection (AC)	3P+PE 100 A*
<u>Grid supply connector</u>	<u>Not included. Customer installs preferred plug.</u>
Supply cable length	16.4 ft.
Input nominal voltage	480 VAC
Input operating voltage	380...480 VAC +6%/-10%
Input frequency	50...60 Hz
Nominal input power	58 kVA (at nominal input voltage)
Power factor at full load	0.92
Efficiency at full load	94%
Idle power	20 VA
Overvoltage category	III
Rated conditional short-circuit current	25 kA
Network type	TN-S, TN-C, TN-C-S, TT

\* If 60 A is used, power is reduced accordingly

\*\*Comes standard with ZEF Energy branding on the front

## Environmental specifications

Operating temperature	-22...122 °F
Current derating	Maximum charging current decreases 2% for every 1.8 °F rise in temperature above 77 °F
Maximum altitude without derating	6562 ft.
Altitude derating	Maximum charging current decreases 1.4% for every 328 ft. rise above 6562 ft.
Operational noise level	< 60 dB at 3.3 ft. distance
Storage temperature	-40...140 °F
Ambient air humidity	< 95% relative humidity
Enclosure rating	Suitable for outdoor use

## Connections and protocols

WiFi	802.11 b/g/n (2.4/5 GHz)
Cellular/GPS	LTE-FDD, LTE-TDD, WCDMA, GSM
Ethernet	RJ45, IEEE 802.3/802.3u
OCPP	1.6j/2.0.1
Connectivity	ZEFNET Backend Software

## Electrical protections

Over/undervoltage
Surge protection
Short circuit
Overload protection
Earth leakage current monitoring
Device overtemperature
Vehicle connector pin temperature monitoring

## DC charging output

	T500 (500 V)	T800 (800 V)
Nominal output power at 480 VAC	50 kW (with 2 outputs: Dynamic 50 kW one output or 25 kW per output at 480 VAC and 400 VDC)	50 kW (with 2 outputs: Dynamic 50 kW one output or 25 kW per output at 480 VAC and 667 VDC)
Nominal output current	2 x 63 A, 1 x 125 A	2 x 37 A, 1 x 75 A
Output voltage range	150...500 VDC	200...920 VDC

## Product codes

Product code	Charging outputs	Vehicle connector	Simul. charging with 2 outputs	Nominal charging cable current
<b>T500</b>				
T•U•5B•S•L	1	CCS1	N/A	150 A
T•UU•5B•S•L	2	2 x CCS1	Yes	2 x 150 A
T•D•5B•S•L	1	CHAdeMO	N/A	125 A
T•UD•5B•S•L	2	CCS1 & CHAdeMO	Yes	150 A & 125 A
<b>T800</b>				
T•U•5A•S•L	1	CCS1	N/A	80 A
T•UU•5A•S•L	2	2 x CCS1	Yes	2 x 80 A
T•UD•5A•S•L	2	CCS1 & CHAdeMO	Yes	80 A & 125 A

**Note:** Versions with 23 ft. charging cables, change 5 to 7 in the product code, e.g. from T500•P40•CD•5•B•S to T500•P40•CD•7•B•S

**Note:** For CCS2 vehicle connector availability, contact ZEF Energy

**Note:** T800 with CHAdeMO, voltage and power limitations apply

## Compliance to standards

IEC 61851-1, IEC 61851-23, IEC 61851-21-2, IEC 62196-3, IEC 60309
UL 2202, UL 2231-1, UL 2231-2
CSA Std. c22.2 No. 281.2, CSA Std. c22.2 No. 107.1
C22.2 No. 182.1-13
EMC Class A FCC Part 15

## Options

CCS2 charging cables	Available upon request
Customized branding	Branding options, such as custom colors and stickers Contact ZEF Energy for availability, pricing, and minimum order quantity

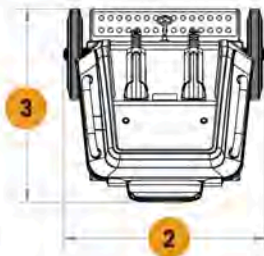
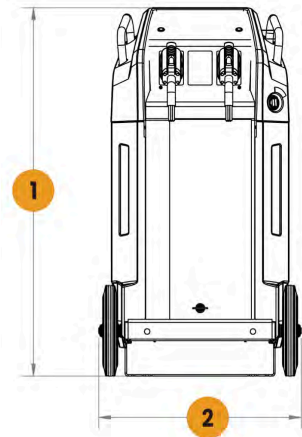
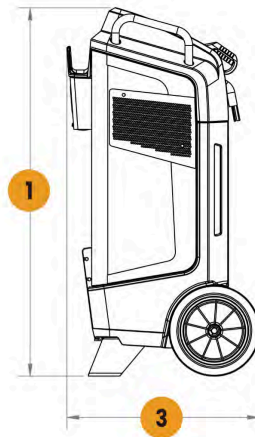
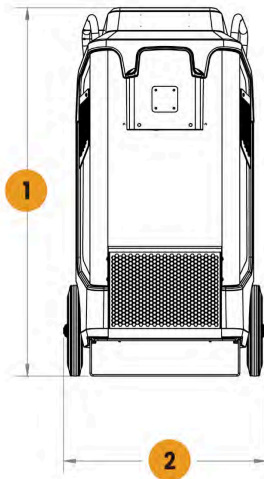
## Mechanical dimensions

### Size (W x H x D)

Ca. 25.1 x 47.9 x 26 in.
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### Weight

1 charging cable	Ca. 309–331 lb.
2 charging cables	Ca. 353–397 lb.



- 1 47.9 in.
- 2 26.4 in.
- 3 25.1 in.