

Station Charger E7-C500



The Station Charger is the all-in-one DC charging solution with dynamic power management.

The Station Charger is a powerful all-in-one solution for electric vehicle fast charging sites. Utilizing ETAG's user-friendly cable system, the Station Charger can have one or two DC charging outputs. An optional AC charging socket is also available. By utilizing individual 25 kW power channels in the installed power modules, the Station Charger's unique dynamic power management harnesses the full potential of on-demand power routing. This enables significant cost savings in the installed charging hardware and grid connection while optimizing the charging experience.

A double cabinet Station Charger can have up to eight 50 kW power modules, providing a maximum charging power of up to 400 kW.

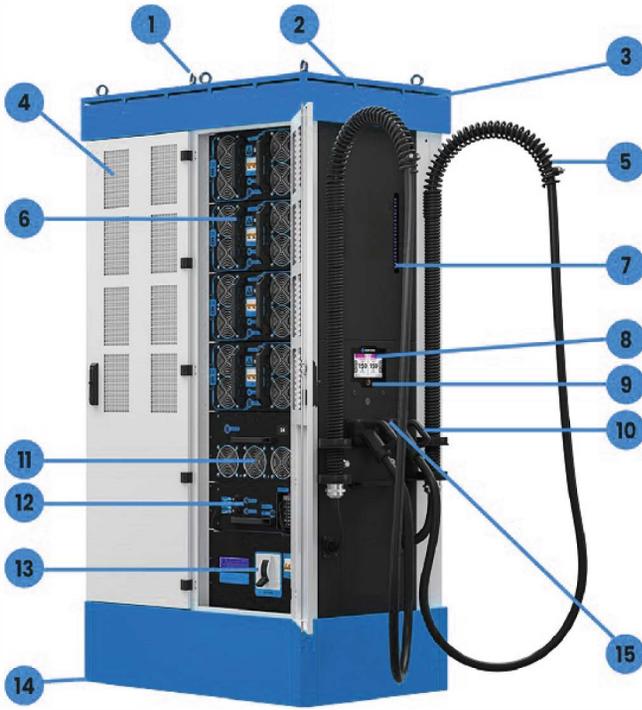
With dynamic power management, the available charging power of all power modules is automatically distributed to all connected charging outputs according to the requests of the electric vehicles.

Power range

Up to 400 kW

Adaptive voltage range

150–1000 V



- 1 Lifting lugs
- 2 WiFi/cellular/GPS antenna
- 3 Air outlet
- 4 Air inlet
- 5 Charging cable support system
- 6 Power module (1-4 pcs/cabinet)
- 7 Charging status indication LEDs
- 8 7" touch screen display
- 9 RFID reader (ISO 14443A)
- 10 Vehicle connectors
- 11 Power distribution module
- 12 Control module
- 13 Main switch
- 14 AC supply cable entry
- 15 AC charging socket



Advanced cable support system for premium user experience



Scalability with add-on power modules



Reduced installation cost with all-in-one charging solution



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



Lockable door for safety and easy access



Advanced charging control and customization with ChargeEye

Ground breaking modular technology, guarantees Dynamic Load Sharing and caring for ultra-fast Charging

Product code interpretation

E7-C501•P160•NC•5•C•S•D2•C0
charging

Station Charger **E7-C500** single cabinet • 200 kW power • 1 x CCS2 vehicle connector • charging cable length 5 m • nominal charging cable current 200 A • standard user interface • up to 2 dynamic outputs • unbranded

Item	Code	Description
Product type	E7-C501	Station Charger C500 single cabinet
	E7-C502	Station Charger C500 double cabinet
Charging power ^[1]	P40	50 kW (1 module)
	P120	100 kW (2 modules)
	P120	150 kW (3 modules)
	P160	200 kW (4 modules)
	P240	300 kW (6 modules)
	P320	350 kW (7 modules)
	P320	400 kW (8 modules)
		N
Vehicle connector type	C	CCS2
	CC	2 X CCS2
	CCA	2 X CCS2 & Type 2 AC
	CD	CCS2 & CHAdeMO
	CDA	CCS2 & CHAdeMO & Type 2 AC
Charging cable length	5	5 m
	7	7 m
Nominal charging cable current	B	125 A (CHAdeMO)
	C	200 A (CCS2)
	D	250 A (CCS2)
	E	300 A/500 A ^[2] (CCS2)
User interface and payment	S	Standard user interface
	P	Payter P66: Only contactless payments, no strong customer authentication (SCA) possibility
Power distribution modules	D2	Up to 2 adaptive dynamic outputs 150–1000 VDC
Branding options	C0	Unbranded: roof and base in black color, no stickers
	Cn	Branded: number (n) indicates branding, e.g. C8

^[1] Standard operation. See Power performance table for details.

^[2] With 300 A charging cables:
500 A (max. 10 min) in +25 °C. Requires at least 3 output terminals and a specific hardware configuration.
375 A continuous in +25 °C. Requires at least 2 output terminals and a specific hardware configuration.

General electrical specifications

Input voltage	380...480 VAC +6%/-10%
Input frequency	50...60 Hz
Output voltage	150...1000 VDC
AC charging level 2	240 V phase voltage (3 phase supply)
Power factor at full load	0.92
Efficiency at full load	94%
Idle power	20 VA
Standby power	C501: 50 W C502: 180 W
Oversoltage category	III
Icc	70 kA
Network type	TN-S, TN-C, TN-C-S, TT

Environmental specifications

Operating temperature	-30...+55 °C (Delivery from 3 rd Quarter 2024)
Current derating	Charging current decreases 1.5% for every 1 °C rise in temperature above +40 °C
Maximum altitude without derating	2000 m
Altitude derating	Charging current decreases 1.4% for every 100 m rise above 2000 m
Operational noise level	Wall side: < 57 dB at 1 m distance Door side: < 62 dB at 1 m distance
Storage temperature	-40...+60 °C
Ambient air humidity	< 95% relative humidity
Enclosure rating	IP54, IK10 (IK09 for the payment terminal)



Email : info@etagmbh.com
Web : www.etagmbh.com

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	ChargEye solution
CCS2	DIN 70121:2012, ISO 15118:2013, ISO 15118:2010
CHAdEMO	0.9/1.0
Type 2 AC	IEC 61851-1
Authentication methods	RFID: ISO 14443A, ISO 15693, ISO 14443B (STM SRI512) Customer backend via OCPP Payment terminal AutoCharge ISO 15118-2 Plug & Charge

Electrical protections

Over/undervoltage
Surge protection
Short circuit
Overload protection
Earth leakage current monitoring
Device overtemperature

Power performance

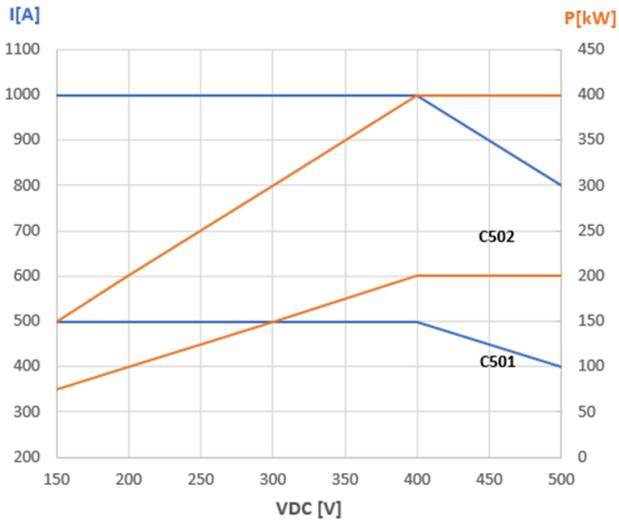
Product type	Number of power modules	Number of independent AC supply cables*	Standard operation			Continuous operation		
			Charging power	Input current per supply cable at 400 V**	Input current per supply cable at 480 V	Charging power	Input current per supply cable at 400 V**	Input current per supply cable at 480 V
E7-C501	1	1	50 kW	91 A	76 A	40 kW	73 A	61 A
	2	1	100 kW	181 A	151 A	80 kW	145 A	121 A
	3	1	150 kW	272 A	227 A	120 kW	218 A	182 A
	4	1	200 kW	362 A	302 A	160 kW	290 A	242 A
E7-C502	5	2	250 kW	91 A	76 A	200 kW	73 A	61 A
	6	2	300 kW	181 A	151 A	240 kW	145 A	121 A
	7	2	350 kW	272 A	227 A	280 kW	218 A	182 A
	8	2	400 kW	362 A	302 A	320 kW	290 A	242 A

* Each cabinet has a dedicated supply cable

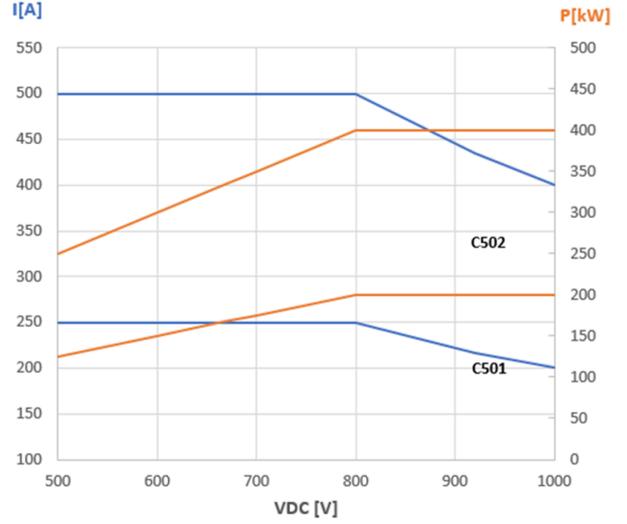
** Add 32 A if Type 2 option is included

Email : info@etagmbh.com
 Web : www.etagmbh.com

Figure 1. Power curve (standard operation)

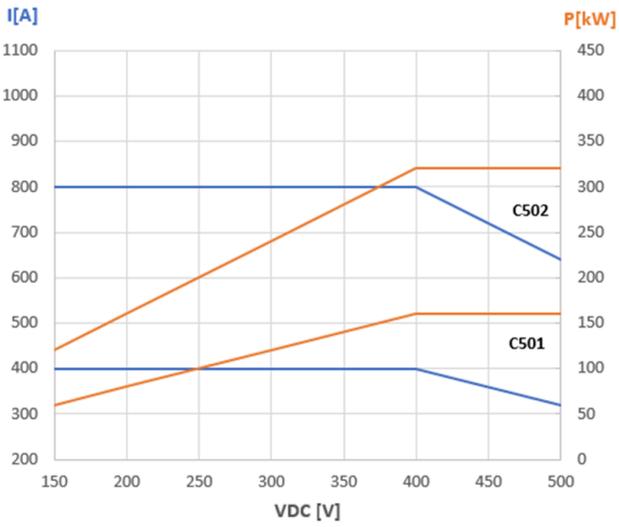


150-500 VDC

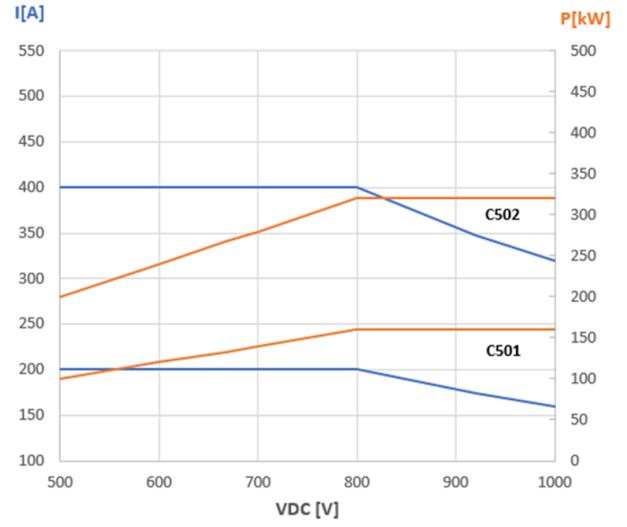


500-1000 VDC

Figure 2. Power curve (continuous operation)



150-500 VDC



500-1000 VDC

Product codes

Product code	Vehicle connector	Max. charging current	Max. DC charging power at 400 VDC ^[1]	Max. DC charging power at 800 VDC ^[1]
E7-C501-CC-x-C	2 x CCS2	2 x 200 A	2 x 80 kW	2 x 160 kW
E7-C501-CC-x-D	2 x CCS2	2 x 250 A	2 x 100 kW	2 x 200 kW
E7-C501-CC-x-E	2 x CCS2	2 x 300/500 A ^[2]	2 x 120/200 kW	2 x 200 kW
E7-C501-CD-x-CB	CCS2 & CHAdeMO	200 A & 125 A	80 kW & 50 kW	160 kW & 100 kW
E7-C501-CD-x-DB	CCS2 & CHAdeMO	250 A & 125 A	100 kW & 50 kW	200 kW & 100 kW
E7-C501-CD-x-EB	CCS2 & CHAdeMO	300/500 A ^[2] & 125 A	120/200 kW & 50 kW	200 kW & 100 kW
E7-C501-CCA-x-C	2 x CCS2 & Type 2 AC	2 x 200 A & AC 3 phases 32 A	2 x 80 kW & AC 22 kW	2 x 160 kW & AC 22 kW
E7-C501-CCA-x-D	2 x CCS2 & Type 2 AC	2 x 250 A & AC 3 phases 32 A	2 x 100 kW & AC 22 kW	2 x 200 kW & AC 22 kW
E7-C501-CCA-x-E	2 x CCS2 & Type 2 AC	2 x 300/500 A ^[2] & AC 3 phases 32 A	2 x 120/200 kW & AC 22 kW	2 x 200 kW & AC 22 kW
E7-C501-CDA-x-CB	CCS2 & CHAdeMO & Type 2 AC	200 A & 125 A & AC 3 phases 32 A	80 kW & 50 kW & AC 22 kW	160 kW & 100 kW & AC 22 kW
E7-C501-CDA-x-DB	CCS2 & CHAdeMO & Type 2 AC	250 A & 125 A & AC 3 phases 32 A	100 kW & 50 kW & AC 22 kW	200 kW & 100 kW & AC 22 kW
E7-C501-CDA-x-EB	CCS2 & CHAdeMO & Type 2 AC	300/500 A ^[2] & 125 A & AC 3 phases 32 A	120/200 kW & 50 kW & AC 22 kW	200 kW & 100 kW & AC 22 kW

^[1] Depends on the number of installed power modules

^[2] With 300 A charging cables:

500 A (max. 10 min) in +25 °C. Requires at least 3 output terminals and a specific hardware configuration.

375 A continuous in +25 °C. Requires at least 2 output terminals and a specific hardware configuration.

Note: With 2 x DC & 1 x AC simultaneous charging possible with all three outputs. Requires at minimum two power modules for simultaneous adaptive voltage DC charging.

Note: Depending on the required cable length, replace x in the product code with 5 or 7, e.g. E7-C502-CD-5-CB for a 5 m cable.



Product code	Vehicle connector	Max. charging current	Max. DC charging power at 400 VDC ^[1]	Max. DC charging power at 800 VDC ^[1]
E7-C502•CC•x•C•	2 x CCS2	2 x 200 A	2 x 80 kW	2 x 160 kW
E7-C502•CC•x•D•	2 x CCS2	2 x 250 A	2 x 100 kW	2 x 200 kW
E7-C502•CC•x•E•	2 x CCS2	2 x 300/500 A ^[2]	2 x 120/200 kW	2 x 240/400 kW
E7-C502•CD•x•CB•	CCS2 & CHAdeMO	200 A & 125 A	80 kW & 50 kW	160 kW & 100 kW
E7-C502•CD•x•DB•	CCS2 & CHAdeMO	250 A & 125 A	100 kW & 50 kW	200 kW & 100 kW
E7-C502•CD•x•EB•	CCS2 & CHAdeMO	300/500 A ^[2] & 125 A	120/200 kW & 50 kW	240/400 kW & 100 kW
E7-C502•CCA•x•C•	2 x CCS2 & Type 2 AC	2 x 200 A & AC 3 phases 32 A	2 x 80 kW & AC 22 kW	2 x 160 kW & AC 22 kW
E7-C502•CCA•x•D•	2 x CCS2 & Type 2 AC	2 x 250 A & AC 3 phases 32 A	2 x 100 kW & AC 22 kW	2 x 200 kW & AC 22 kW
E7-C502•CCA•x•E•	2 x CCS2 & Type 2 AC	2 x 300/500 A ^[2] & AC 3 phases 32 A	2 x 120/200 kW & AC 22 kW	2 x 240/400 kW & AC 22 kW
E7-C502•CDA•x•CB•	CCS2 & CHAdeMO & Type 2 AC	200 A & 125 A & AC 3 phases 32 A	80 kW & 50 kW & AC 22 kW	160 kW & 100 kW & AC 22 kW
E7-C502•CDA•x•DB•	CCS2 & CHAdeMO & Type 2 AC	250 A & 125 A & AC 3 phases 32 A	100 kW & 50 kW & AC 22 kW	200 kW & 100 kW & AC 22 kW
E7-C502•CDA•x•EB•	CCS2 & CHAdeMO & Type 2 AC	300/500 A ^[2] & 125 A & AC 3 phases 32 A	120/200 kW & 50 kW & AC 22 kW	240/400 kW & 100 kW & AC 22 kW

^[1] Depends on the number of installed power modules

^[2] With 300 A charging cables:

500 A (max. 10 min) in +25 °C. Requires at least 3 output terminals and a specific hardware configuration.

375 A continuous in +25 °C. Requires at least 2 output terminals and a specific hardware configuration.

Note: With 2 x DC & 1 x AC simultaneous charging possible with all three outputs. Requires at minimum two power modules for simultaneous adaptive voltage DC charging.

Note: Depending on the required cable length, replace x in the product code with 5 or 7, e.g. C502•CD•5•CB for a 5 m cable.

Compliance to standards

IEC 61851-1

IEC 61851-23

IEC 61851-21-2

Options

Customized branding

Branding options, such as custom colors and stickers

Contact Kempower for availability, pricing, and minimum order quantity

Mechanical dimensions

Size (W x H x D)

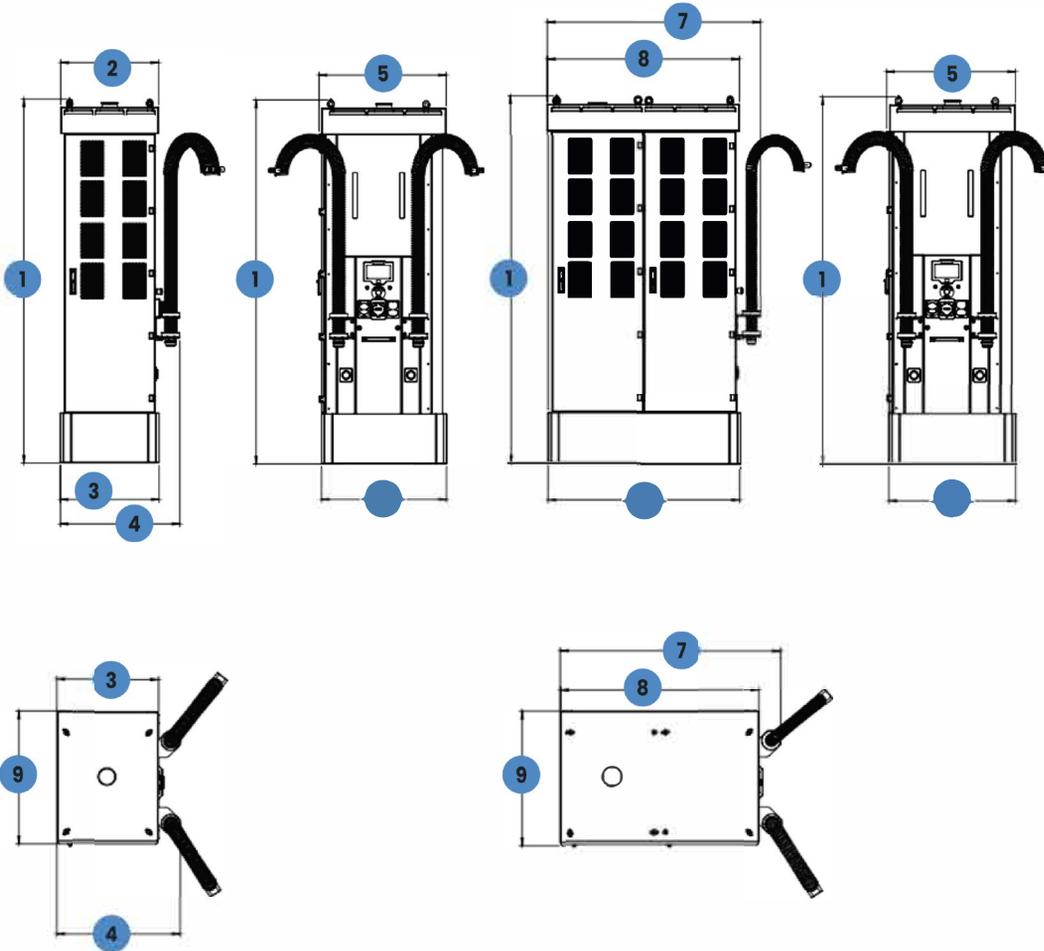
E7-C501: 651 x 2395 x 841 mm

E7-C502: 1250 x 2395 x 841 mm

Weight

Maximum 525 kg

Maximum 925 kg



1	2395 mm	3	651 mm	5	839 mm	7	1388 mm	9	841 mm
2	645 mm	4	788 mm	6	826 mm	8	1250 mm		

“Always
fail-safe,”

ETAG

ETAG Energietechnik GmbH

Egelsbach Germany

EUROPEAN TECHNOLOGY ALLIANCE GROUP

Phone : +49 6441 383 30 99
Fax : +49 6441 383 30 89
Email : info@etagmbh.com
Web : www.etagmbh.com

ETAG POWER ELECTRONICS L.L.C.

Dubai-United Arab Emirates

Post Box - 26499

Phone : +971 4 396 0965

Fax : +971 4 358 2998

Email : info@etagmbh.com / export@etagmbh.com

Web : www.etagmbh.com