

ETAG Power Unit E7-C800



The ETAG Power Unit is the heart of ETAG's flexible, modular and scalable DC charging system with dynamic power management.

One Power Unit can simultaneously provide energy for up to 8 DC charging outputs: Satellites or Pantographs. By utilizing individual 25 kW power channels in the installed power modules, the Power Unit'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 triple cabinet Power Unit can have up to twelve 50 kW power modules, providing a maximum nominal power of up to 600 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.

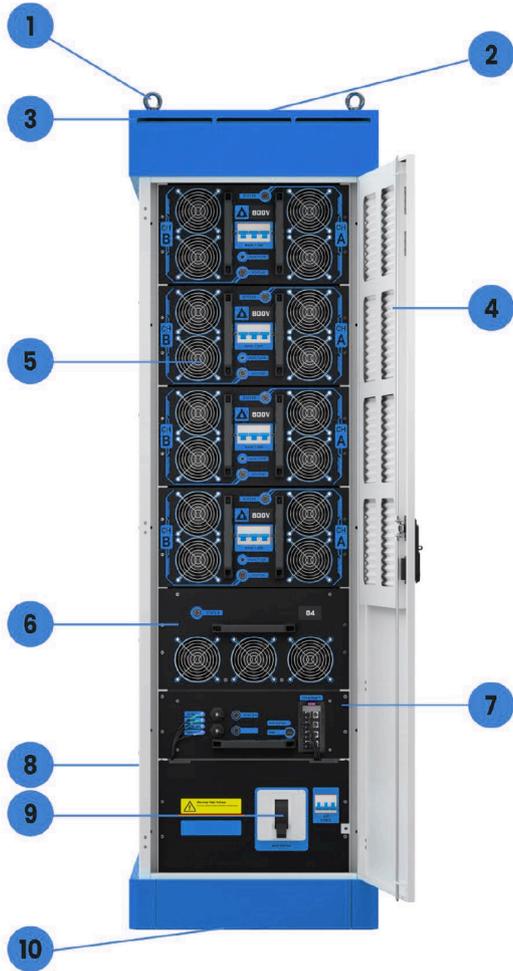
Power range

Up to **600 kW**

Number of charging outputs in the system

1-8

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



- 1 Lifting lugs
- 2 WiFi/cellular/GPS antenna
- 3 Air outlet
- 4 Air inlet
- 5 Power module (1–4 pcs/cabinet)
- 6 Power distribution module
- 7 Control module
- 8 DC output
- 9 Main switch
- 10 AC supply cable entry



Charging power for up to 8 charging outputs, 8 single Satellites or 4 double Satellites



1–4 50 kW power modules per Power Unit cabinet



Scalability with add-on power modules



Improved cost efficiency of the charging system



Lockable door for safety and easy access



Advanced charging control and customization with ChargeEye

Product code interpretation

E7-C801-P160-N-D4-C0

ETAG Power Unit E7-C800 single cabinet • 200 kW charging power • no vehicle connector • up to 4 dynamic outputs • unbranded

| Item | Code | Description |
|-------------------------------|---------|---|
| Product type | E7-C801 | ETAG Power Unit E7-C800 single cabinet ^[1] |
| | E7-C802 | ETAG Power Unit E7-C800 double cabinet ^[1] |
| | E7-C803 | ETAG Power Unit C800 triple cabinet ^[1] |
| Charging power ^[2] | P160 | 200 kW (4 modules) |
| | P320 | 400 kW (8 modules) |
| | P480 | 600 kW (12 modules) |
| Vehicle connector type | N | No connector |
| Power distribution modules | D4 | Up to 4 dynamic outputs ^[3] |
| | D6 | Up to 6 dynamic outputs ^[3] |
| | D8 | Up to 8 dynamic outputs ^[3] |
| | R | Static power distribution ^[4] |
| Branding options | C0 | Unbranded: roof and base in black color, no stickers |
| | Cn | Branded: number (n) indicates branding, e.g.C8 |

^[1] The rated current of a single charging output terminal using a power distribution module is limited to 200 A.

^[2] Standard operation. See Power performance table for details.

^[3] 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.

^[4] Dynamic power distribution upgrade is available.

General electrical specifications

| | |
|---------------------------|------------------------|
| Input voltage | 380...480 VAC +6%/-10% |
| Input frequency | 50...60 Hz |
| Output voltage | 200...920 VDC |
| Power factor at full load | 0.92 |
| Efficiency at full load | 94% |
| Idle power | 20 VA |
| Standby power | C801: 50 W |
| | C802: 100 W |
| | C803: 150 W |
| Overvoltage category | III |
| Icc | 70 kA |
| Network type | TN-S, TN-C, TN-C-S, TT |

Email : info@etagmbh.com

Web : www.etagmbh.com

| | |
|-----------------------------------|---|
| Operating temperature | -30...+50 °C |
| 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 | < 60 dB at 1 m distance |
| Storage temperature | -40...+60 °C |
| Ambient air humidity | < 95% relative humidity |
| Enclosure rating | IP54, IK10 |

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 |

Electrical connections (between Power Unit and vehicle connectors)

| |
|---|
| DC power cable per vehicle connector (terminals 2 x 150 mm ² per pole) |
| Control cable 24 VDC |
| Control bus cable |

Electrical protections

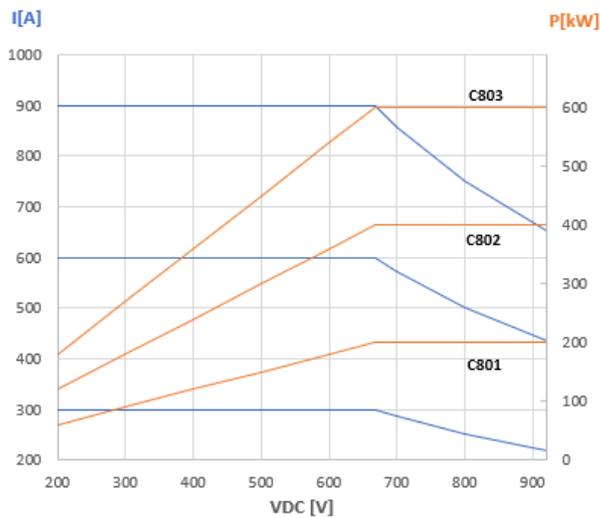
| |
|----------------------------------|
| Over/undervoltage |
| Surge protection |
| Short circuit |
| Overload protection |
| Earth leakage current monitoring |
| Device overtemperature |

Power performance

| Product type | Number of power modules | Number of independent AC supply cables* | Standard operation | | | Continuous operation | | |
|--------------|-------------------------|---|---------------------------|---|---|---------------------------|---|---|
| | | | Charging power at 667 VDC | Input current per supply cable at 400 V | Input current per supply cable at 480 V | Charging power at 667 VDC | Input current per supply cable at 400 V | Input current per supply cable at 480 V |
| C801 | 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 |
| C802 | 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 |
| C803 | 9 | 3 | 450 kW | 91 A | 76 A | 360 kW | 73 A | 61 A |
| | 10 | 3 | 500kW | 181 A | 151 A | 400 kW | 145 A | 121 A |
| | 11 | 3 | 550 kW | 272 A | 227 A | 440 kW | 218 A | 182 A |
| | 12 | 3 | 600 kW | 362 A | 302 A | 480 kW | 290 A | 242 A |

* Each cabinet has a dedicated supply cable.

Figure 1. Power curve (standard operation)



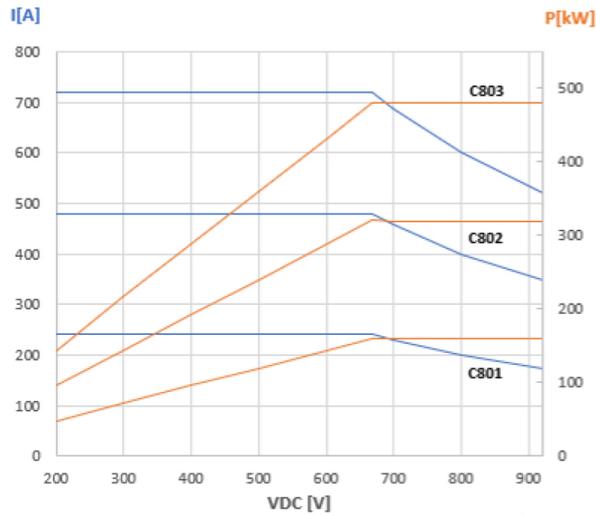


Figure 2. Power curve (continuous operation)

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 ETAG for availability, pricing, and minimum order quantity |
| Steel base | Installation kit for a single cabinet, for flat surface assembly |

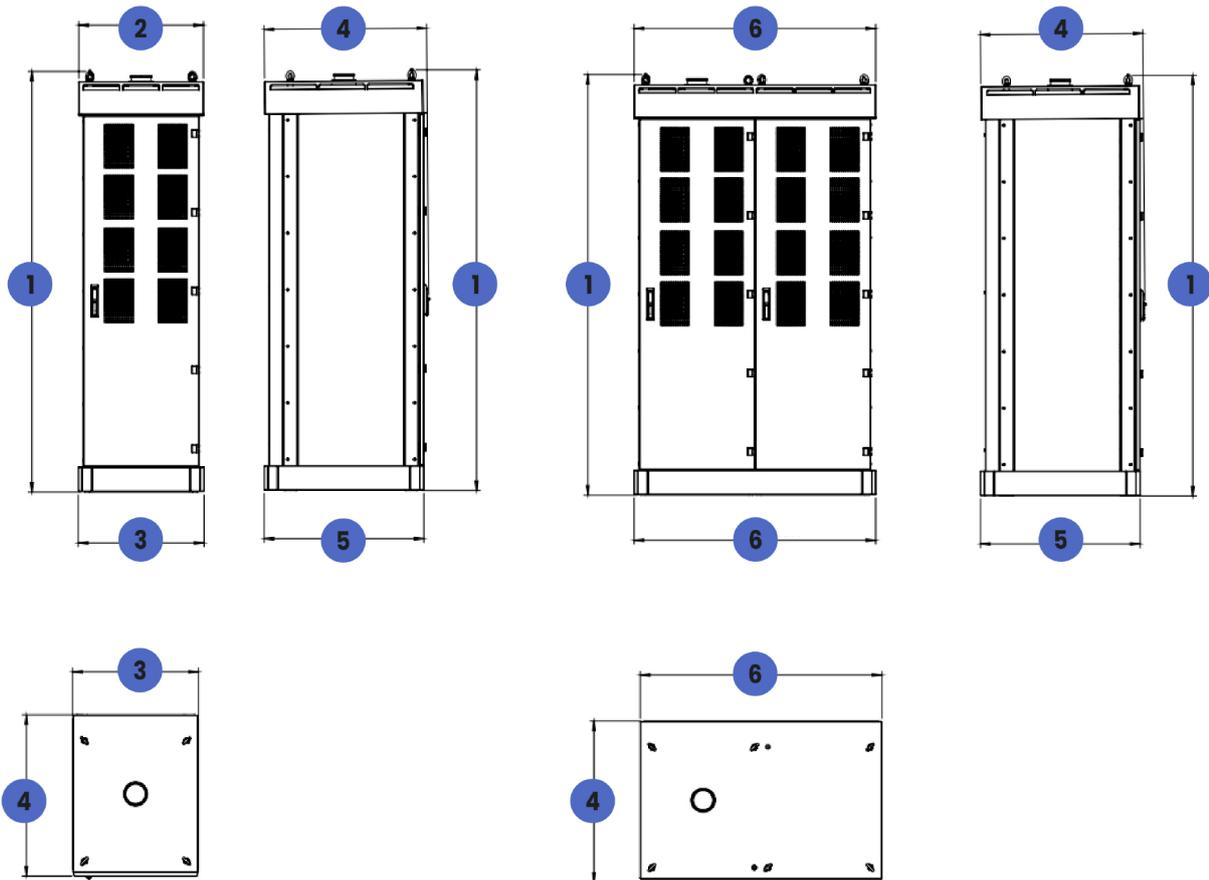
Mechanical dimensions

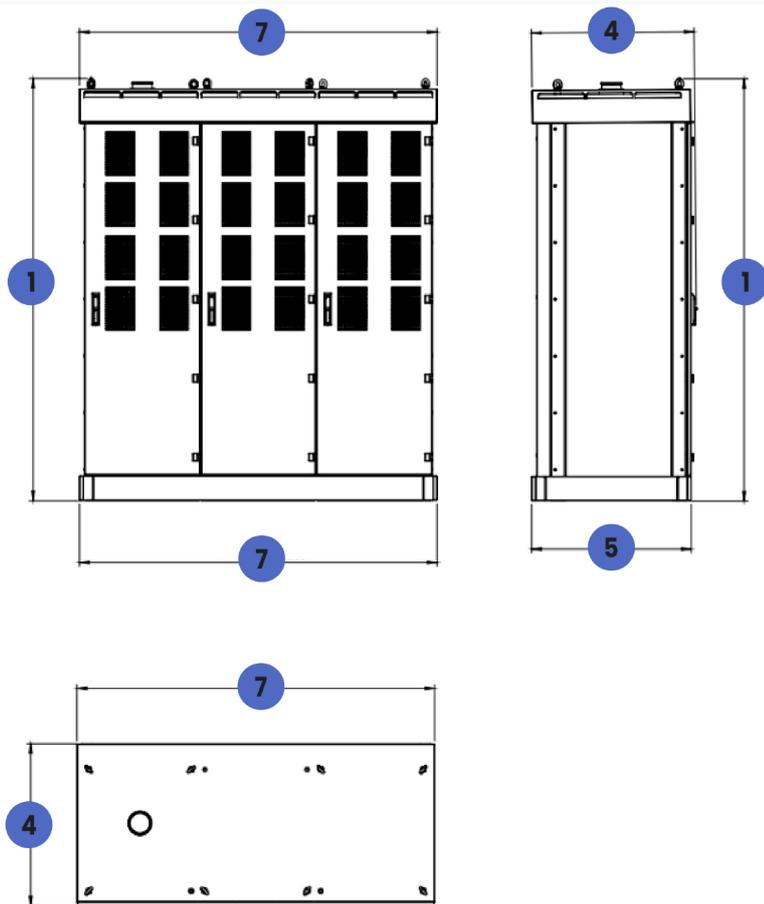
Size (W x H x D)

C801: 650 x 2195 x 841 mm
C802: 1250 x 2195 x 841 mm
C803: 1850 x 2195 x 841 mm

Weight

| | |
|-------------|---------|
| C801P40... | 280 kg |
| C801P80... | 320 kg |
| C801P120... | 360 kg |
| C801P160... | 400 kg |
| C802P200... | 680 kg |
| C802P240... | 720 kg |
| C802P280... | 760 kg |
| C802P320... | 800 kg |
| C803P360... | 1080 kg |
| C803P400... | 1120 kg |
| C803P440... | 1160 kg |
| C803P480... | 1200 kg |





1 2195 mm 3 650 mm 5 825 mm 7 1850 mm
 2 645 mm 4 841 mm 6 1250 mm

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



“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