

Harmonie Power Technology **DC Chargers Catalogue**

Version: 1.2 Date: 2025/10/08

HPTENERGY.COM.AU



ePenguin 22kW DC CHARGER

Model: GP22 Gen.2



Specification

Rated Output Power

Details

22 kW

DC Output

Voltage Range

200 – 1000 V

Constant Power Voltage Range

300 – 1000 V

Current

0 – 73.3 A

AC Input

Voltage Range

400 V AC ($\pm 10\%$)

Frequency Range

50 – 60 Hz

Rated Input Current

33.7 A @ 400 V

Power Factor

≥ 0.99

Efficiency & Consumption

| | |
|----------------|--------|
| Max Efficiency | ≥ 95% |
| Standby Power | < 10 W |

System Characteristics

| | |
|--------------|--|
| Dimensions | 680 × 380 × 187 mm |
| Weight | 48 Kg |
| Cable Length | 5 / 7 m |
| Noise | ≤ 55 dB (≤ 50 dB in low-noise mode) |
| Cooling | Isolated air cooling |
| Mounting | Wall/Column-mounted |

Protection

| | |
|-----------------------------|---|
| AC input over/under-voltage | DC over/under-voltage |
| Over-current, short-circuit | Over-temperature |
| Insulation monitoring | Reverse polarity / anti-reverse current |
| Anti-theft protection | |

User Interface & Communication

| | |
|------------------------------------|------------------------------|
| 5" touchscreen, RFID | Emergency stop |
| One-key start/stop | SOC percentage LED indicator |
| 4G / Ethernet / WLAN Communication | |

OCPP Support

OCPP1.6J - 2.1

Environmental

| | |
|-----------------------|--------------------------------|
| Operating Temperature | -40 to 75 °C |
| Humidity | ≤ 95% non-condensing |
| Altitude | ≤ 2000 m |
| Ingress Protection | IP65, C5M anticorrosion |

Certification & Standards

CE, RCM

Warranty

3 years (Optional extended warranty packages available)



Sungrow **30kW** DC CHARGER

Model: IDC30E

Specification

Rated Output Power

DC Output

Voltage Range

Current Range

AC Input

Voltage Range

Frequency Range

Rated Input Current

Max Input Current

Power Factor

Efficiency & Consumption

Max Efficiency

System Characteristics

Dimensions

Weight

Cable Length

Noise

Cooling

Mounting

Details

30 kW

200 – 1000 V

0 – 80 A

400 V AC (±10%)

50 - 60 Hz

46 A

52 A

≥ 0.99

≥ 96.5%

500 × 800 × 288 mm

55 Kg

5 / 7 m

≤ 50 dB

Isolated air cooling

Wall/Column-mounted or Trolley



Protection

| | |
|-----------------------------|---|
| AC input over/under-voltage | DC over/under-voltage |
| Over-current, short-circuit | Over-temperature |
| Insulation monitoring | Reverse polarity / anti-reverse current |
| Anti-theft protection | |

User Interface & Communication

| | |
|--|------------------------------|
| 7" touchscreen | Emergency stop |
| RFID, Plug & Play, Auto-charge, Plug & Charge, optional payment terminal | |
| 4G / Ethernet / WLAN Communication | SOC percentage LED indicator |

OCPP Support

OCPP1.6J - 2.1

Environmental

| | |
|-----------------------|--------------------------------|
| Operating Temperature | -40 to 75 °C |
| Humidity | ≤ 95% non-condensing |
| Altitude | ≤ 2000 m |
| Ingress Protection | IP65, C5M anticorrosion |
| Impact | IK10 (IK08 HMI) |

Certification & Standards

CE, CB, UKCA, RCM, ADQCC, MoIAT, PEA, SASO, MEW
IEC 61851-1/-21-2/-23/-24, EN IEC 62311

Warranty

3 years (Optional extended warranty packages available)



ePenguin 40kW DC CHARGER

Model: GP40



Specification

Rated Output Power

Outlets

DC Output

Voltage Range

Max Output Current

AC Input

Voltage Range

Frequency Range

Rated Input Current

Power Factor

Details

40 kW or 2 × 20 kW

2 × CCS2

200 – 1000 V

133 A

400 V AC (±10%)

50 – 60 Hz

61 A @400 V 3 Phase

≥ 0.99

Efficiency & Consumption

| | |
|----------------|--------|
| Max Efficiency | ≥ 95% |
| Standby Power | < 10 W |

System Characteristics

| | |
|--------------|-----------------------|
| Dimensions | 790 × 580 × 290 mm |
| Weight | 110 Kg |
| Cable Length | 5 / 7 m |
| Cooling | Forced air cooling |
| Mounting | Wall / Column-mounted |

Protection

| | |
|-----------------------------|---|
| AC input over/under-voltage | DC over/under-voltage |
| Over-current, short-circuit | Over-temperature |
| Insulation monitoring | Reverse polarity / anti-reverse current |
| Anti-theft protection | |

User Interface & Communication

| | |
|--|----------------|
| 10.1" touchscreen, RFID, QR Code | Emergency stop |
| 4G / Ethernet / WLAN / CAN / RS485 / RS232 Communication | |

OCPP Support

OCPP1.6J - 2.1

Environmental

| | |
|-----------------------|--------------|
| Operating Temperature | -35 to 50 °C |
| Humidity | ≤ 95% |
| Altitude | ≤ 2000 m |
| Ingress Protection | IP55, IK10 |

Warranty

3 years (Optional extended warranty packages available)





ePenguin 50kW DC CHARGER

Model: GP50



Specification

Rated Output Power

Outlets

DC Output

Voltage Range

Maximum Current

AC Input

Voltage Range

Frequency Range

Rated Input Current

Power Factor

Details

50 kW or 2 × 25 kW

2 × CCS2

200 – 1000 V

150 A

400 V AC ($\pm 10\%$)

50 – 60 Hz

78 A @400 V

≥ 0.99

Efficiency & Consumption

| | |
|----------------|--------|
| Max Efficiency | ≥ 95% |
| Standby Power | < 10 W |

System Characteristics

| | |
|--------------|-------------------------------------|
| Dimensions | 1320 × 520 × 200 mm |
| Noise | ≤ 55 dB (≤ 50 dB in low-noise mode) |
| Cooling | Isolated air cooling |
| Cable Length | 5 / 7 m |
| Mounting | Wall/Column-mounted |

Protection

| | |
|-----------------------------|---|
| AC input over/under-voltage | DC over/under-voltage |
| Over-current, short-circuit | Over-temperature |
| Insulation monitoring | Reverse polarity / anti-reverse current |
| Anti-theft protection | |

User Interface & Communication

| | |
|------------------------------------|----------------|
| 5" touchscreen, RFID | Emergency stop |
| 4G / Ethernet / WLAN Communication | |

OCPP Support

OCPP1.6 - 2.1

Environmental

| | |
|-----------------------|---------------------------|
| Operating Temperature | -30 to +50 °C |
| Humidity | 5 - 95% Rh non-condensing |
| Altitude | ≤ 2000 m |
| Ingress Protection | IP65, IK10 |

Certification & Standards

CE, RCM

Warranty

3 years (Optional extended warranty packages available)



ePenguin 60kW DC CHARGER

Model: GP60



Specification

Rated Output Power

Outlets

DC Output

Voltage Range

Max Output Current

AC Input

Voltage Range

Frequency Range

Rated Input Current

Power Factor

Details

60 kW or 2 × 30 kW

2 × CCS2

200 – 1000 V

200 A

400 V AC (±10%)

50 – 60 Hz

92 A @400 V 3 Phase

≥ 0.99

Efficiency & Consumption

Max Efficiency **≥ 95%**

System Characteristics

Dimensions **1600 × 670 × 480 mm**
Weight **230 Kg**
Cable Length **5 / 7 m**
Cooling **Forced air cooling**
Mounting **Floor mounted**

Protection

AC input over/under-voltage DC over/under-voltage
Over-current, short-circuit Over-temperature
Insulation monitoring Reverse polarity / anti-reverse current
Anti-theft protection

User Interface & Communication

10.1" touchscreen, RFID Emergency stop
Ethernet / Wi-Fi / CAN / RS485 / RS232

OCP Support

OCPPI.6J - 2.1

Environmental

Operating Temperature **-30 to +50 °C**
Humidity **5 - 95%**
Altitude **≤ 2000 m**
Ingress Protection **IP55, IK10**

Certification & Standards

CE, RCM

Warranty

3 years (Optional extended warranty packages available)



ePenguin 80kW DC CHARGER

Model: GP80

Specification

Rated Output Power

Outlets

DC Output

Voltage Range

Max Output Current

AC Input

Voltage Range

Frequency Range

Rated Input Current

Power Factor

Details

80 kW or 2 × 40 kW

2 × CCS2

200 – 1000 V

200 A

400 V AC ($\pm 10\%$)

50 – 60 Hz

123 A @400 V 3 Phase

≥ 0.99



Efficiency & Consumption

Max Efficiency $\geq 95\%$

System Characteristics

Dimensions **1600 × 670 × 480 mm**
Weight **280 Kg**
Cable Length **5 / 7 m**
Cooling **Forced air cooling**
Mounting **Floor mounted**

Protection

AC input over/under-voltage DC over/under-voltage
Over-current, short-circuit Over-temperature
Insulation monitoring Reverse polarity / anti-reverse current
Anti-theft protection

User Interface & Communication

10.1" touchscreen, RFID Emergency stop
Ethernet / Wi-Fi / CAN / RS485 / RS232

OCPP Support

OCPP1.6J - 2.1

Environmental

Operating Temperature **-30 to +50 °C**
Humidity **5 - 95%**
Altitude **≤ 2000 m**
Ingress Protection **IP55, IK10**

Certification & Standards

CE, RCM

Warranty

3 years (Optional extended warranty packages available)



ePenguin 120kW DC CHARGER

Model: GP120



Specification

Rated Output Power

Outlets

DC Output

Voltage Range

Max Output Current

AC Input

Voltage Range

Frequency Range

Rated Input Current

Power Factor

Details

120 kW

(Dynamic Allocation Dual Plugs)

2 × CCS2

200 – 1000 V

400 A

400 V AC (±10%)

50 – 60 Hz

183 A @400 V

≥ 0.99

Efficiency & Consumption

Max Efficiency **≥ 95%**

System Characteristics

Dimensions **1854 × 800 × 603 mm**
Weight **325 Kg**
Cable Length **5 / 7 m**
Cooling **Forced air cooling**
Mounting **Floor mounted**

Protection

AC input over/under-voltage DC over/under-voltage
Over-current, short-circuit Over-temperature
Insulation monitoring Reverse polarity / anti-reverse current
Anti-theft protection

User Interface & Communication

10.1" touchscreen, RFID Emergency stop
Ethernet / Wi-Fi / CAN / RS485 / RS232

OCPP Support

OCPP1.6J - 2.1

Environmental

Operating Temperature **-30 to +50 °C**
Humidity **5 - 95%**
Altitude **≤ 2000 m**
Ingress Protection **IP55, IK10**

Certification & Standards

CE, RCM

Warranty

3 years (Optional extended warranty packages available)



Sungrow **180kW** DC CHARGER

Model: IDC180E

Specification

Rated Output Power

Details

180 kW
(Dynamic Allocation Dual Plugs)

DC Output

Voltage Range **200 – 1000 V**
Current Range **380 A** (per outlet)
Outlets **2 × CCS2**

AC Input

Voltage Range **380 / 400 V AC** ($\pm 10\%$)
Frequency Range **50 - 60 Hz** (45 – 65 Hz)
Rated Input Current **289 A**
Power Factor **≥ 0.99**

Efficiency & Consumption

Max Efficiency **$\geq 96.5\%$**
Standby Power **$\leq 48 W$**



System Characteristics

| | |
|--------------|-----------------------------|
| Dimensions | 930 × 2030 × 615 mm |
| Weight | ≤ 500 Kg |
| Cable Length | 5 / 7 m |
| Noise | ≤ 65 dB |
| Cooling | Isolated air cooling |
| Mounting | Floor mounted |

Protection

| | |
|-----------------------------|---|
| DC over/under-voltage | AC input over/undervoltage |
| Over-current, short-circuit | Reverse polarity / anti-reverse current |
| Insulation monitoring | Over-temperature |

User Interface & Communication

| | |
|--|----------------|
| 10" touchscreen | Emergency stop |
| RFID, Plug & Play, Auto-charge, Plug & Charge, optional payment terminal | |
| 4G / Ethernet / WLAN Communication | |
| MID-certified Metering (Eichrecht/PTB optional) | |

OCPP Support

OCPP1.6J - 2.1

Environmental

| | |
|-----------------------|--------------------------------|
| Operating Temperature | -35 to +55 °C |
| Humidity | 5 - 95% non-condensing |
| Altitude | ≤ 2000 m |
| Ingress Protection | IP65, C5M anticorrosion |
| Impact | IK10 (IK08 HMI) |

Certification & Standards

CE, CB, UKCA, RCM, ADQCC, MoIAT, PEA, SASO, MEW
IEC 61851-1/-21-2/-23/-24, EN IEC 62311

Warranty

3 years (Optional extended warranty packages available)



ePenguin 240kW DC CHARGER

Powered by **CATL**

Model: GP240-BE



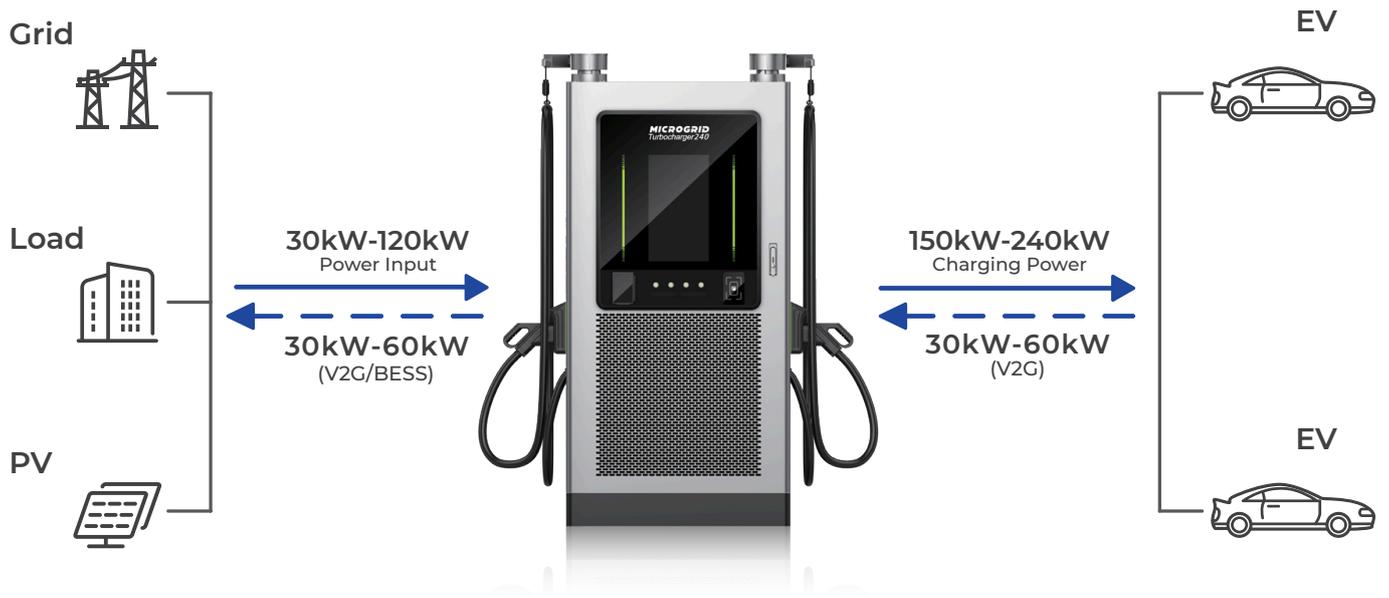
Scalable & Rapid Deployment

Compact footprint < 1.5 m²
Plug & play compatibility with existing infrastructure
Commissions within 1 week



Grid-friendly Operation

120 kW or less grid input (no transformer upgrade)
152 kWh CATL LFP battery energy reservoir
Dual-mode operation: **EV charging + BESS**



Specification

Rated Output Power

Details

240 kW

(Dynamic Allocation Dual Plugs)

DC Output

Voltage Range

200 – 1000 V

Current Range

400 A (per outlet)

Outlets

2 × CCS2

AC Input

Voltage Range

380 / 400 V AC (±10%)

Frequency Range

50 - 60 Hz (45 – 65 Hz)

Power Factor

≥ 0.99

Efficiency & Consumption

Max Efficiency

≥ 96.5%

Standby Power

≤ 48 W

System Characteristics

| | |
|--------------|--|
| Dimensions | 1000 × 1350 × 2250 mm |
| Weight | ≤ 1850 Kg |
| Cable Length | 5 / 7 m |
| Noise | ≤ 65 dB |
| Cooling | Forced air (Charger) Liquid (Battery) |
| Mounting | Floor mounted |

Protection

| | |
|-----------------------------|---|
| DC over/under-voltage | AC input over/undervoltage |
| Over-current, short-circuit | Reverse polarity / anti-reverse current |
| Insulation monitoring | Over-temperature |

User Interface & Communication

| | |
|--|----------------|
| 21.5" touchscreen | Emergency stop |
| RFID, Plug & Play, Auto-charge, Plug & Charge, optional payment terminal | |
| 4G / Ethernet / WLAN Communication | |

OCCP Support

OCCP1.6J - 2.0.1

Environmental

| | |
|-----------------------|--------------------------------|
| Operating Temperature | -30 to +50 °C |
| Humidity | 5 - 95% non-condensing |
| Altitude | ≤ 2000 m |
| Ingress Protection | IP55, C5M anticorrosion |
| Impact | IK10 |

Certification & Standards

CE, RCM

Warranty

3 years (Optional extended warranty packages available)

Sungrow

480 kW

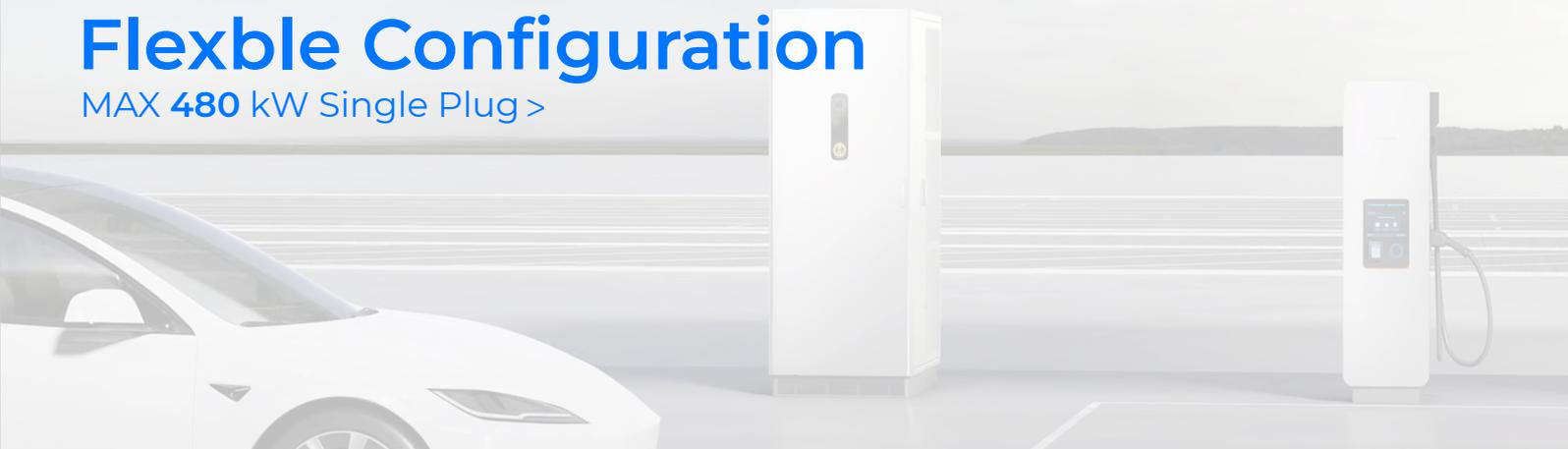
Ultra Fast DC CHARGER

Model: IDC480E



Flexible Configuration

MAX 480 kW Single Plug >





Specification

Rated Output Power

DC Output

Voltage Range

Current Range

Outlets

AC Input

Voltage Range

Frequency Range

Rated Input Current

Power Factor

Efficiency & Consumption

Max Efficiency

Standby Power

Details

Up to 480 kW (Dynamic Allocation Multi-plugs)

200 – 1000 V

Up to 1600 A

Up to 8 dispensers

400 V AC ($\pm 10\%$)

50 - 60 Hz

770 A

≥ 0.99

$\geq 96.5\%$

≤ 30 W



System Characteristics

| | |
|----------------------|---|
| Dimensions (cabinet) | 900 × 2200 × 1380 mm |
| Cable Length | 5 / 7 m |
| Weight | ≤ 1100 Kg |
| Noise | ≤ 65 dB |
| Cooling | Isolated air cooling (liquid cooling option for dispensers) |
| Mounting | Cabinet + dispensers (dual/single cable options) |

Protection

| | |
|-----------------------------|---|
| DC over/under-voltage | AC input over/undervoltage |
| Over-current, short-circuit | Reverse polarity / anti-reverse current |
| Insulation monitoring | Over-temperature |

User Interface & Communication

| | |
|--|------------------------------|
| 10" touchscreen | Emergency stop |
| RFID, Plug & Play, Auto-charge, Plug & Charge, optional payment terminal | |
| 4G / Ethernet / WLAN Communication | SOC percentage LED indicator |
| MID-certified Metering (Eichrecht/PTB optional) | |

OCPP Support

OCPP1.6J - 2.0.1

Environmental

| | |
|-----------------------|--------------------------------|
| Operating Temperature | -35 to +55 °C |
| Humidity | 5 - 95% non-condensing |
| Altitude | ≤ 2000 m |
| Ingress Protection | IP65, C5M anticorrosion |
| Impact | IK10 (IK08 HMI) |

Certification & Standards

CE, CB
IEC 61851-1/-21-2/-23/-24, EN IEC 62311

Warranty

3 years (Optional extended warranty packages available)

Sungrow Dynamic Load Management

Products covered: IDC30E (30 kW DC), IDC180E (180 kW DC), IDC480E (up to 480 kW DC)

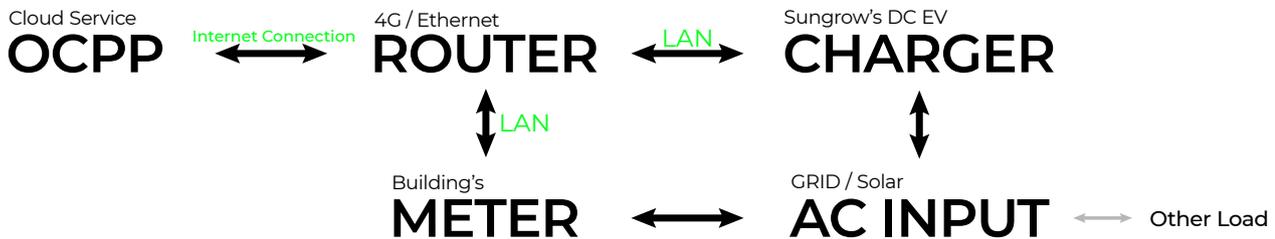
Why load management?

Sungrow's Dynamic Load Management (DLM) coordinates how much power each draws so a site stays within its electrical limit while serving more vehicles, cutting peak demand, and aligning charging with tariffs and renewables.

How it works (site level)

- Site limit control: Set a total kW ceiling for the station; DLM continuously reallocates power, so the sum of all chargers never exceeds it.
- Real-time prioritization: Distribute power evenly or prioritize by arrival/need (configurable minimum per connector).
- Meter-aware integration: With an AC meter (CTs) measuring building load, DLM uses only the headroom left after non-EV loads.
- Open connectivity: Local LAN for DLM coordination; OCPP for remote monitoring, pricing, and firmware updates via cloud; Ethernet or 4G backhaul.

Architecture at a glance



Supported Products

| Model | Configuration | Networking | Ideal Use Case |
|-----------------|--|---|--|
| IDE30E - 30kW | Single cabinet with 1 connector (urban destination DC) | Full DLM over LAN; optional AC meter; OCPP (Ethernet/4G) | Showroom, fleet, dealership workplace |
| IDC180E - 180kW | High-power cabinet Multi-connector options | Full DLM over LAN; optional AC meter; OCPP (Ethernet/4G) | Highway, service center and busy sites |
| IDC480E - 480kW | Ultra-high-power cabinet Multi dispenser layout options | Site wide DLM; Fine-grain dynamic allocation OCPP (Ethernet/4G) | Flag-ship hubs |