



Your Home EV Supercharger

Featuring blackout power and solar charging.
For North America



- **Blackout Power:** Use your EV's battery to sail through multi-day utility grid outages
- **Solar Charging:** Charge your EV with the unlimited, free power of the sun
- **Power Boost:** One mile of range per minute of charge
- **Orchestrate™ OS:** Unique operating system that minimizes your energy costs and carbon footprint
- **Dual Charge:** Charge two EVs at once
- **Easy Outdoor or Indoor Installation:** Installed by a single technician

A single dcbel replaces the following equipment:

- Level 2 electric vehicle charger
- Fast DC bi-directional electric vehicle charger
- Solar inverter
- Stationary battery charger / inverter
- Smart home energy manager



| DC Fast EV Charger | |
|--------------------------------|---|
| Connectors | CHAdeMO / CCS |
| AC Inputs | |
| Nominal Voltage (V) | 240 Single Phase or +120/-120 Split Phase |
| Voltage Range (V) | 208-254 |
| Nominal Current (A) | 64 |
| Frequency (Hz) | 60 (50 capable) |
| DC Outputs | |
| Nominal Power @400V (W) | 15 200 |
| Nominal Voltage (V) | 400 |
| Voltage Range ¹ (V) | 150-500 |
| Nominal Current (A) | 38 |
| Max Efficiency (%) | 96.3 |
| Voltage Ripple (%) | < 2.5 |

| Solar Inverter | |
|----------------------------|---|
| DC Inputs | |
| Max PV Power (Wp) | 20 000 |
| Open Circuit Voltage (Voc) | 600 |
| MPPT operating range (V) | 240-500 |
| Short Circuit Current (A) | 28 per MPPT |
| Max Current (A) | 19 per MPPT |
| Number of MPPT Channels | 2 |
| Max Strings per MPPT | 1 |
| AC Outputs | |
| Nominal Power (W) | 15 200 |
| Nominal Voltage (V) | 240 Single Phase or +120/-120 Split Phase |
| Voltage Range (V) | 208-254 |
| Nominal Current (A) | 64 |
| Nominal Frequency (Hz) | 60 (50 capable) |
| Max Efficiency (%) | 98.4 |
| Power factor (%) | > 99 |
| THD (%) | < 3 |



| EV Inverter (V2H / V2G ²) | |
|---------------------------------------|---|
| Connectors | CHAdeMO / CCS |
| DC Inputs | |
| Nominal Voltage (V) | 400 |
| Voltage Range ¹ (V) | 150-500 |
| Nominal Current (A) | 19 |
| AC Outputs | |
| Nominal Power (W) | 7 600 / 15 200 ³ |
| Nominal Voltage (V) | 240 Single Phase or +120/-120 Split Phase |
| Voltage Range (V) | 208-254 |
| Nominal Current (A) | 32 / 64 ³ |
| Frequency (Hz) | 60 (50 capable) |
| Max Efficiency (%) | 98.4 |
| Power factor (%) | > 99 |
| THD (%) | < 3 |
| Grid Forming | True Sine Wave |

| AC Level 2 EV Charger | |
|--------------------------|---|
| Connector | SAE J1772 |
| Nominal Output Power (W) | 7 200 |
| Nominal Voltage (V) | 240 Single Phase or +120/-120 Split Phase |
| Voltage Range (V) | 208-254 |
| Nominal Current (A) | 30 |

¹ Varies based on AC grid input.

² V2G-ready. Functionality may vary based on local utility regulations and V2G protocols.

³ Available with upcoming software update. Functionality may be limited by your EV's capabilities.

| Stationary Battery ⁴ | |
|---------------------------------|---|
| Communication | RS485 / CAN Bus |
| Charging | |
| AC Inputs | |
| Nominal Voltage (V) | 240 Single Phase or +120/-120 Split Phase |
| Voltage Range (V) | 208-254 |
| Nominal Current (A) | 32 |
| Frequency (Hz) | 60 (50 capable) |
| DC Outputs | |
| Nominal Power (W) | 7 600 |
| Nominal Voltage (V) | 400 |
| Voltage Range (V) | 240-500 |
| Nominal Current (A) | 19 |
| Max Efficiency (%) | 96.3 |
| Voltage Ripple (%) | < 2.5 |
| Discharging | |
| DC Inputs | |
| Nominal Voltage (V) | 400 |
| Voltage Range (V) | 240-500 |
| Nominal Current (A) | 19 |
| AC Outputs | |
| Nominal Power (W) | 7 600 |
| Nominal Voltage (V) | 240 Single Phase or +120/-120 Split Phase |
| Voltage Range (V) | 208-254 |
| Nominal Current (A) | 32 |
| Frequency (Hz) | 60 (50 capable) |
| Max Efficiency (%) | 98.4 |
| Power factor (%) | > 99 |
| THD (%) | < 3 |
| Grid Forming | True Sine Wave |

| Tempo™ | |
|------------------------|----------|
| Disconnect Current (A) | 200 |
| AC Sensor | CT Clamp |

| AC UPS | |
|----------------------------|-----------------|
| Nominal Output Voltage (V) | 120V |
| Nominal Output Current (A) | 6 |
| Frequency (Hz) | 60 (50 capable) |

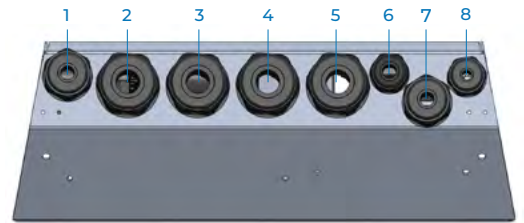
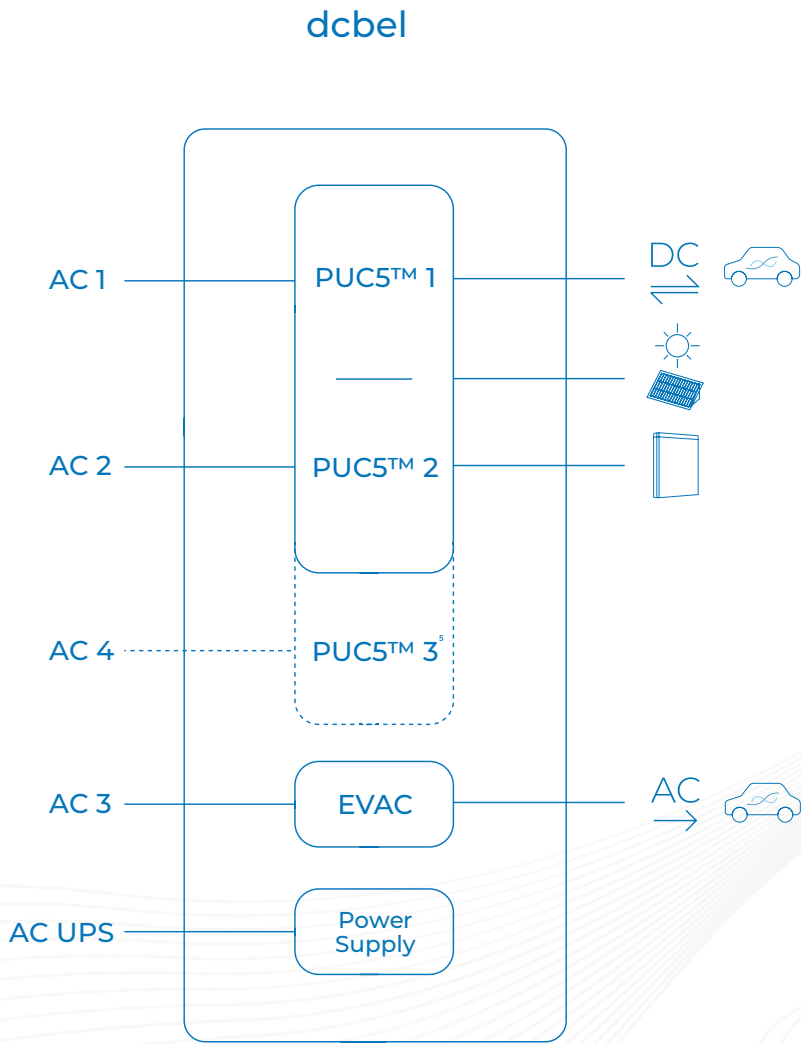
| General | |
|--|--|
| Dimensions | |
| Height (inch / mm) | 31.5 / 800 |
| Width (inch / mm) | 19.7 / 500 |
| Depth (inch / mm) | 9.1 / 230 |
| Total Weight (lbs / kg) | <90 / <42 |
| Max Component Module Weight (lbs / kg) | 55 / 25 |
| Standby Monitoring Power Consumption (W) | <30 |
| Communication | RJ45 - TCP/IP ready |
| Operating Temperature (°F/°C) | -40 to 104 / -40 to 40 |
| Enclosure | NEMA 3R, IP54, UL94 5VB |
| Certification | UL 2202, 2594, 2231-1, 2231-2, 1741 SA, IEEE 1547.1, FCC Part 15 (pending) |
| Security Certification | CC Certified (TPM 2.0 at EAL4+) & FIPS 140-2 Level 1 & 2 |

| AC Connection: Breaker Size Recommendation | |
|--|-------------------------------------|
| Installation with Blackout Power | |
| DC Charger, Solar Inverter, V2H/V2G, ESS (A) (Double-pole breaker in main panel) | 125 (including critical load panel) |
| EV AC Charger (A) (Double-pole breaker in main panel) | 40 |
| UPS connected to wall socket (A) (Single-pole breaker in critical load panel) | 15 |
| Installation without Blackout Power | |
| DC Charger, Solar Inverter, V2H/V2G, ESS (A) (Double-pole breaker in main panel) | 2 x 40 |
| EV AC Charger (A) (Double-pole breaker in main panel) | 40 |
| Power Supply (A) (Single-pole breaker in main panel) | 15 |

| AC Output (dcbel™ to Home) | |
|----------------------------|---|
| Nominal Output Power (W) | 15 200 |
| Nominal Output Voltage (V) | 240 Single Phase or +120/-120 Split Phase |
| Output Voltage Range (V) | 208-254 |
| Nominal Output Current (A) | 64 |
| Frequency (Hz) | 60 (50 capable) |

⁴ Stationary battery management available with upcoming software update.

Power Distribution Diagram



- 1 • AC UPS Uninterruptable Power Supply
- 2 • AC1 & AC2 Utility Grid to PUC5™ 1 & PUC5™ 2
- 3 • AC3 & AC4 Utility Grid to EVAC & PUC5™ 3
- 4 • EVAC SAE J1772 Type 1 EV Connector
- 5 • EVDC CHAdeMO or CCS1 EV Connector
- 6 • BAT & BATCOM Stationary Battery and Communication
- 7 • PV1 & PV2 PV Array 1 & 2
- 8 • COM Tempo, Ethernet and ATS Communication

5 Upgrade your dcbel™ with the Supersonic kit for supersonic charging and additional solar power. Available in 2021.



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