**EV Charging Solution**

# DC Charger / DC Wallbox 50kW
(Smart Version)

- ≥ 96 % efficiency saves on energy and costs
- Extremely small footprint for more flexible charging site deployment
- OCPP and network connectivity for seamless system integration

Parking  Commercial Areas  Traffic Hub

DELTA

# Slim Design for Powerful Service

The DC Wallbox 50 kW provides high-efficiency charging services for commercial sites. With a charging efficiency of ≥ 96 %, thickness of only 25 cm, and support for simultaneous charging with a maximum output of 50 kW of DC power from two charging guns, the DC Wallbox 50 kW is suitable for sites such as roadside parking, parking lots, department stores, commercial and office buildings and EV fleet charging stations without requiring the replanning of existing parking spaces.

The DC Wallbox 50kW is OCPP-compatible, enabling backend integration for capabilities including user identification, remote monitoring and system control. Its small footprint and compact wall-mount design enable site owners to optimize their site space and layout.
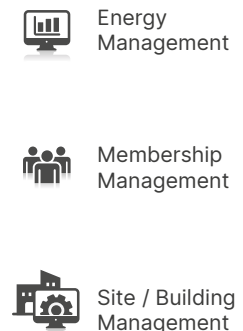
## Application Scenario

### Charging Network

- Parking
- Commercial Areas
- Traffic Hub

### Backend Office

EV Charging Network Management System

Mobile App access for remote control

### Applications

- Energy Management
- Membership Management
- Site / Building Management

... and more

# Feature Highlights

## ≥ 96 % efficiency saves on energy and costs

**96 %** ↑

- Simultaneous charging service with max. 50 kW output
- 62 % less energy dissipation, saving up to 7,300 kWh per year

## Extremely small footprint for flexible charging site deployment

**60 %**

- Compact size, extremely small foot print (900 x 650 x 250 mm)
- Wall-mounted or stand-based installation
- Designed for indoor and outdoor environments
  (IP55 and IK10 protection)

## OCPP and network connectivity for seamless system integration

- Supports OCPP 1.6J (upgradeable to OCPP 2.0)
- Built-in Ethernet and cellular (3G / 4G) network connectivity
- Integrable with commercial and management systems
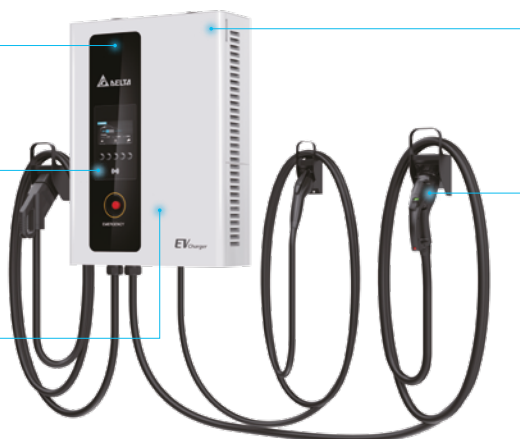  for improved operational efficiency

# Product at a Glance

**Network Connectivity**
Ethernet, Cellular

**User Authentication**
RFID, Credit card reader

**Pluggable Power Module**

**Protection**
IP55, IK10

**Charging Standard**
- Optional CCS2 or CHAdeMO interface up to 50 kW
- AC Type 2 socket up to 22 kW

# Specifications

| Model | DC Wallbox 50 kW | |
|---|---|---|
| **Input** | | |
| Grid Connection | Three-phase electric power (L1, L2, L3, N, PE) | |
| AC Voltage | 230 V / 400 V | |
| Frequency | 50 Hz / 60 Hz | |
| Nominal Current | 110 A | |
| Maximum Current | 125 A | |
| Power Factor / THDu | 0.99 / 1% | |
| Terminal | Screw terminal for ring type cable lugs | |
| Protection | Over current protection, over voltage protection (class II) | |
| **Charging Output** | | |
| Total System Power | 72 kW | |
| Max. Qty. of Charging Outlets | 3 simultaneously working charging outlets (2 x DC und 1 x AC) | |
| **DC Charging Outlet** | **CCS** | **CHAdeMO** |
| Nominal Power | 50 kW | 50 kW |
| Nominal Current | 125 A at 400 V | 125 A at 400 V |
| Voltage Range | 200 to 920 V | 200 to 500 V |
| Cable Length | 4 m (optional 7 m) | 4 m (optional 7 m) |
| Protection | Ground fault monitoring, isolation monitoring | Ground fault monitoring, isolation monitoring |
| Compliance | IEC 61851-23 / -24, IEC 62196-3, DIN 70121 | IEC 61851-23 / -24, JEVS G 105 (Rev. 1.2) |

| **AC Charging Outlet** | | | |
|---|---|---|---|
| Nominal Power | 22 kW | Cable Length | 5 m (optional 7 m) |
| Nominal Current | 32 A per phase | Protection | RCD Type B (AC 30 mA and DC 30 mA) |
| Charging Voltage | 230 V / 400 V | Compliance | IEC 61851-1, IEC 62196-2 |
| Connector Type | AC Type 2 (IEC 62196-2) | | |

| **User Interface** | |
|---|---|
| Display | 7" LC-Display |
| Languages | English (optional: up to four additional languages) |
| Input | 5 context dependent, illuminated buttons. Emergency power off (optional) |
| Authentication | ISO/IEC 1443 A/B RFID. NFC credit card terminal with LC-Display and PIN pad - different models available (optional) |

| **Network Interface** | |
|---|---|
| **Cellular** | |
| Count | 2 (1 x backend connection and 1 x service access) |
| Cellular Technology | 2G / 3G / 4G |
| SIM Card Format | Mini-SIM (25 mm x 15 mm) |
| Protocols and Applications | Backend Connection via OCPP 1.5 and OCPP 1.6 (tested with OCTT). Separate service access |
| **Ethernet** | |
| Connector Type | RJ45 |
| Protocols and Applications | Backend Connection via OCPP 1.5 and OCPP 1.6 (tested with OCTT). ModBus TCP for energy management |

| **Mechanical Properties** | | | |
|---|---|---|---|
| Ingress Protection (IEC 60529) | IP55 | Dimensions* (W x H x D) | 900 × 650 × 250 mm |
| Impact Protection (IEC 62262) | Enclosure: IK10 / LC-Display: IK08 | Weight* | 102 kg |
| Cooling | Forced Air | | |

| **Environmental Conditions** | | | |
|---|---|---|---|
| Operating Temperature Range | -25 °C to +50 °C | Humidity | < 95 % relative humidity, non-condensing |
| Storage Temperature Range | -40 °C to +80 °C | Altitude | Up to 2000 m |

| **Compliance** | |
|---|---|
| EU Low Voltage Directive | IEC 61851-1, IEC 61851-22, IEC 61851-23, IEC 62479 |
| EU EMI Directive | EN 55011, IEC 61851-21-2 |
| Accessibility | N 18040 |

\* Dimension and weight excluding charging connectors, subject to variants. Product outlook depends on configuration. Specifications are subject to change without notice.