EV Charging Solution

DC Charger / DC Wallbox 50kW

- ≥ 96 % efficiency optimizes the total costs of ownership
- Extremely small footprint for more flexible charging site deployment
- Integrated meter and payment terminal to cater for public EV charging
- Advanced cable management system

Parking

Commercial Areas

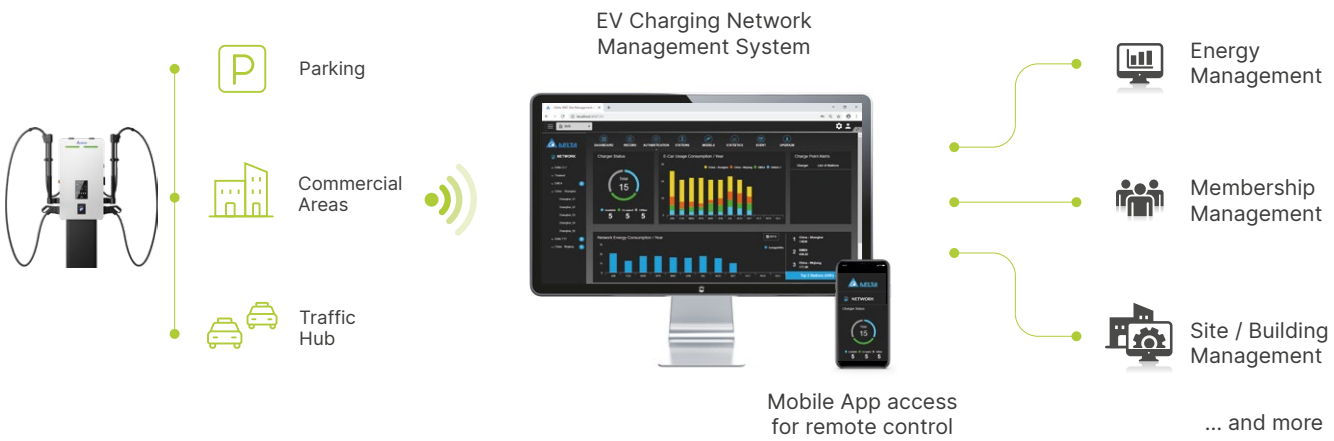
Traffic Hub

Slim Design for Powerful Service

The new DC Wallbox 50 kW is a compact, high-efficiency charging solution for commercial sites, delivering ≥ 96% efficiency in a slim 25 cm design. With simultaneous DC charging across two guns, it's ideal for roadside parking, shopping centers, office buildings, and EV depots, all without major space modifications.

This new generation offers an enhanced feature set, including status indicators to guide the EV driver easily to an available charge point, a credit card reader to enable ad-hoc charging, certified energy meters and an advanced cable management system that ensures an easy and clean handling of the charging plugs.

Application Scenario



Feature Highlights

96 % ↑

≥ 96 % efficiency saves on energy and costs

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

60 %

Extremely small footprint for flexible charging site deployment

- Compact size, extremely small foot print (1200 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

Protection
IP55, IK10

User Authentication
RFID, Credit card reader
Integrated meter
and payment terminal

User interface
Charging status light

Advanced User Experience
Cable Management System

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 and 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	
Maximum Current	166 A	125 A	
Voltage Range	200 to 920 V	200 to 500 V	
Cable Length	5 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 A (AC 30 mA) and RDC-DD (DC 6 mA)
Charging Voltage	230 V / 400 V	Compliance	IEC 61851-1, IEC 62196-2
Connector Type	T2S Socket(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)		
Status Indicators	LED Stripes to indicate the status of the DC charge point		
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)	1200 × 650 × 250 mm
Impact Protection (IEC 62262)	Enclosure: IK10 / LC-Display: IK08	Weight*	102 kg
Cooling	Forced Air	Cable Management System	Spring Type Cable Management System (optional)
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	DIN 18040		

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

More information

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