Multi - Vehicle Ultra - Fast Charging Solution

DC Charger / UFC 500

- 500 kW for public & heavy duty vehicle charging
- 2 x 250 kW power for simultaneous EV charging
- Integrated credit card payment solution and RFID user identification
- Non-liquid cooled high power CCS2 cable (500 A)
- Full accessibility according to DIN 18040

Fast Charging Corridors | Parking | Service Station | Logistics Fleet | Traffic Hub

DELTA

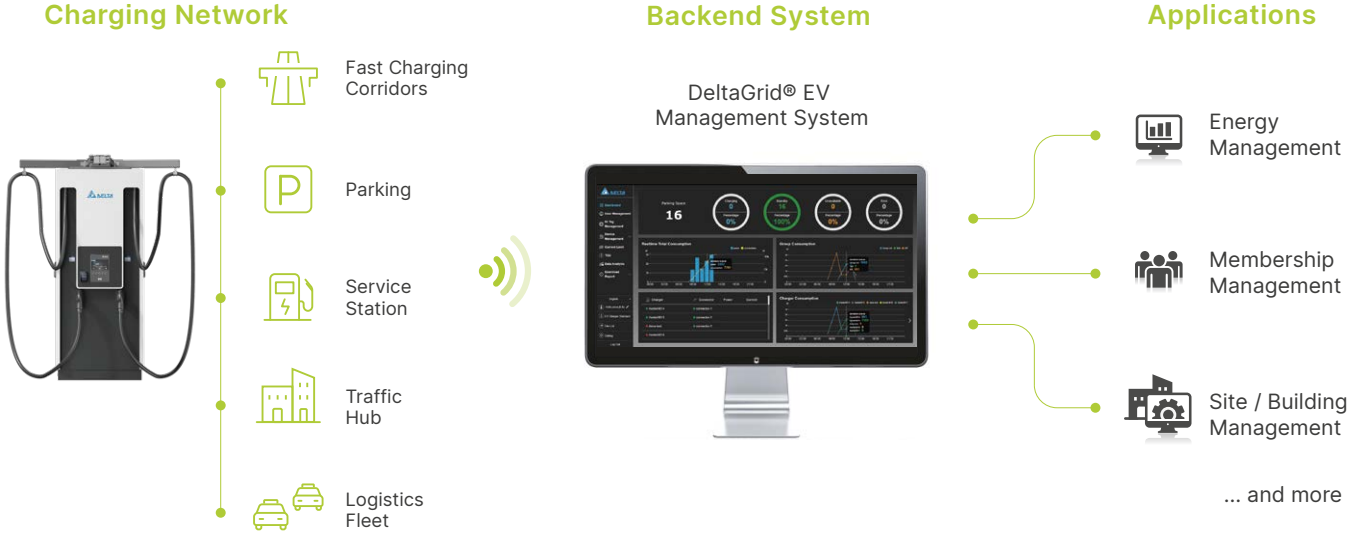
High Power Compact Charger

Unleashing High-Power Charging Innovation for Maximum Efficiency

Delta's UFC 500 platform offers the convenience of a single charging station with the flexibility to charge one vehicle up to 460 kW or two vehicles simultaneously up to 250 kW DC each. The platform is scalable and can be initially equipped with less power modules and upgraded to full capacity in a later stage that the investment is sustainable for entire life cycle.

For large charging parks & fleet applications facing grid connection challenges or the integration of high power charging in a building context such as industry, logistic center.., additional system components such as PV inverters, energy storage, energy management system can be combined on a project base.

Application Scenario



Feature Highlights

Efficient Charging Service

- 500kW for public & heavy duty vehicle charging
- 2 x 250kW power for simultaneous charging
- >96% Power Efficiency
- 500A non-liquid cooled high power CCS2 cable
- Supports up to 920 VDC

Complete System Integration

- Network Connectivity
- Backend Compatibility
- Energy Management
- Interoperability with EV
- Energy metering
- Credit card payment solution

Optimal Operation

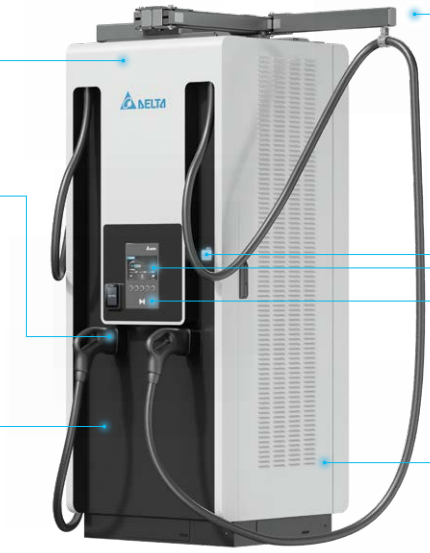
- All-Weather Outdoor Design
- Low Lifecycle Cost
- High Availability Service
- MID, French LNE, German Eichrecht DC energy metering compliance after certification
- Cable Management

Product at a Glance

Network Connectivity
Ethernet, Modem (2G/3G/4G)

Choice of Connector Standard
- CCS2 (non liquid cooled cable)
- CHAdeMO

Protection
IP55, IK10



Cable Management System
4m reach distance

DC Energy Metering
Energy meter reading window

User Interaction
7in LCD , 5 buttons

User Authentication
RFID, App via OCPP, Credit card , Autocharge , PnC (ISO15118-2)

Accessibility
Barrier-free according to DIN 18040

Specifications

Model Name	UFC 500	
Input		
AC Connection	3-Phase, L1, L2, L3, N, PE; Dual AC connection	
AC Voltage	400 V_{RMS} (L- L) ± 10 %	
Frequency	50 / 60 Hz	
Nominal Current	725 A_{RMS} at maximum power	
Power Factor / THDu	0.99 / 1.5 %	
Mains Terminal	Screw type	
Transient OVP	Class II / C protection	
Output		
DC Output Voltage Range	200 V to 920 V_{DC}	
Maximum Current	2*500 A_{DC} at 500 V_{DC} / 500 A_{DC} at 920 V_{DC}	
Maximum Power	500 kW_{DC}	
Cable Length / Reach Distance	5 m/4 m*	
Protection	Over current, Under voltage, Over voltage, Short circuit, Ground fault and Isolation monitoring	
User Interface & Control		
Display	7 inch LCD	
Supported Languages	English (Up to 4 additional languages available on request)	
Push Button	1 Emergency Stop Button (option,not recommended)	
Keypad	5 buttons,Credit card terminal options: Payter P66 & Apollo	
Local Authentification	RFID, App, Payment terminal , Autocharge , PnC (ISO15118-2)	
Network Interface	Ethernet, Modem (2G/3G/4G)	
Protocol	Back-end system integration with OCPP 1.5 and 1.6J Modbus TCP for load management / energy management system integration	
Environmental		
Operating Temperature	-25 ºC to +45 ºC	
Storage Temperature	-40 ºC to +80 ºC	
Humidity	< 95% relative humidity, non-condensing	
Altitude	Up to 2000 m	
Mechanical		
Ingress Protection	IP55	
Enclosure Protection	IK10 on the enclosure, IK08 on the display (according to IEC 62262)	
Cooling	Forced air	
Dimension (W x H x D)	859 × 2079 × 998 mm	
Weight *	700 kg*	
Regulation		
Safety	IEC 61851-1 , EN 61439-7, EN 17186	
EMC	IEC 61851-21-2 / EN 62311, EN 62479	
German Eichrecht	German Eichrecht after certification / French LNE / MID	
Accessibility	DIN 18040	
DC Charging Points	**CCS2**	**CHAdeMO**
Rating cable and connector	500 A_{DC}	125 A_{DC} / 500 V_{DC}
Compliance	IEC 61851-23 / -24, IEC 62196-3, DIN 70121 ISO 15118-2	IEC 61851-23 / -24, JEVS G 105, Rev. 1.2 compliant

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

More information

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