



Multi - Vehicle Ultra - Fast Charging Solution

DC Charger / UFC 500

- 500 kW for 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



Traffic
Hub



Logistics
Fleet



Forward-Looking EV Infrastructure

Speed-up your power with UFC 500

Delta's UFC 500 platform offers the convenience of a single charging station with the flexibility to charge one vehicle up to 500 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

Charging Network

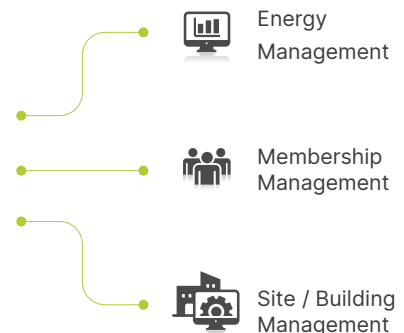


Backend System

DeltaGrid® EV Management System



Applications



... and more

Feature Highlights



Efficient Charging Service

- Simultaneous Charging up to three vehicles
- Dynamic Power Distribution
- >96% Power Efficiency
- 500A non-liquid cooled HP CCS2 cable
- Supports up to 920 VDC



Complete System Integration

- Network Connectivity
- Backend Compatibility
- Energy Management
- Interoperability with EV



Optimal Operation

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



Product at a Glance

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

Charging Standard

- CCS up to 500 kW / 500A peak (non liquid cooled cable)
- CHAdeMO up to 62.5 kW
- AC Type 2 up to 22 kW
- Choice of connector standard

Protection
IP55, IK10



DC Energy Metering
Energy meter reading window

User Interaction
7in LCD , 5 buttons

Accessibility
Barrier-free according to DIN 18040

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

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	757 A _{RMS} at maximum power (500 kW DC + 22 kW AC)	
Power Factor / THDu	0.99 / 5 %	
Mains Terminal / Screw type	Screw type	
Transient OVP	Class II / C protection	
Output		
DC Output Voltage Range	200 to 920 VDC	
Maximum Current	2*500A _{DC} at 400 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, Worldline Valina	
Local Authentication	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 °C to +45 °C	
Storage Temperature	-40 °C to +80 °C	
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		
EMC/RED	IEC 61851-1 , EN 61439-7, EN 17186	
EMC	IEC 61851-21-2 / EN 62311, EN 62479	
DC Energy metering	German Eichrecht after certification / French LNE / MID	
Accessibility	DIN 18040	
DC Charging Points		
	CCS2	CHAdeMO
Rating cable and connector	500 A _{DC} peak (non liquid cooled cable)	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
AC Charging Point		
Nominal AC Voltage	400 V _{RMS}	
Type 2 AC socket (Option)	3 × 32 A _{RMS} at 22 kW	
Protections	RCD Type A 30 mA+ 6 mA DC leakage current detection, compliant to IEC 62955	
Compliance AC connetor & socket	IEC 62196-2 Mode 3, Type 2	

* 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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2023/11