

## HCD-500 PRELIMINARY PRODUCT SUMMARY

# HCD-500 High Power EV Charging Dispenser

## *High Power Charging Dispenser for Distributed Systems*

Motion Applied's electric vehicle charging architecture harnesses our decade long involvement in the development of high-performance batteries and power electronics.

The complete charging solution provides ultra-rapid, dynamic EV charging with high levels of reliability, low noise, high efficiency, and long life.

Motion Applied's HCD-500 is a distributed system, high-speed charging dispenser developed in close collaboration with Motion Applied's strategic partners. It is intended to be used with Motion Applied's DPU-600 Electric Vehicle Charger Power Unit<sup>1</sup>.



### GENERAL SPECIFICATIONS

- Application Environment Indoor/ Outdoor
- Operating Temperature Range -35 °C to +50 °C
- Storage Temperature Range -40 °C to +75 °C
- Relative Humidity 5% to 95%
- Dimensions (W x D x H) 463 x 299 x 1698 mm
- Installation Mode Floor-mounted
- IP Rating IP54
- Impact Protection Level IK10

### POWER INPUT & OUTPUT

- Charge Power (configurable) 60 to 500 kW
- In/ Out Voltage 200 to 1000 Vdc
- In/ Out Current 400 A continuous  
500 A maximum
- Cable Length > 4 m
- Connector 2
- Cable Management System Available
- Vehicle Connection IEC 62196 CCS 2

### USER INTERFACE & COMMUNICATION

- Connection Protocol TCP/ IP
- Communication Protocol OCPP 1.6 & 2.0.1
- Communication Wi-Fi/ Ethernet/ LTE
- Display 10.1" touchscreen  
IK10 anti-reflective
- Charger Status Information RGB LED, Mobile Application, Display
- RFID Card Reader Mifare (ISO-14443-A)
- Standard Language Support English<sup>2</sup>

### PROTECTION

- Isolation Monitoring Device IMD
- Overcurrent/Circuit Protection 2 x 315 A Fuse
- Over-temperature Protection Configurable 60 °C to 80 °C

### MANAGEMENT SPECIFICATION

- Software Update Automatic remote update
- Dynamic Load Balancing Active load balancing<sup>3</sup>
- Central Management OCPP compatible station control and management system

### COMPLIANCE

- EN 61851-1 2019, IEC 62955 2018, IEC 61008-1 2010, IEC/EN 62196-1, IEC 62368-1, IEC 61439-1, ISO 14443-A

<sup>1</sup> See DPU-600 product summary sheet  
<sup>2</sup> Other languages available on request  
<sup>3</sup> Between connectors

## HCD-500 PRELIMINARY PRODUCT SUMMARY

Motion Applied offers the full range of white-labelled charging solutions from 7/22kW AC units to 720kW DC distributed charging with a 1.5 MW DC charger coming soon<sup>1</sup>

- 1 MAC-722  
Untethered  
and tethered  
variants



**7.4 / 22 kW AC**  
Combined  
unit

Screen:  
7" or 5"  
or no-screen  
1x or 2x CCS2

- 2 MDC-80  
/120/160  
/200/240



**80 kW DC**  
**120 kW DC**  
**160 kW DC**  
**200 kW DC**  
**240 kW DC**

Screen: 21.5"  
2 x CCS2

- 3 DPU-240  
power units  
HCD-500  
dispensers



**240 kW**  
distributed DC  
with **500A**  
**dispensers**

Screen: 10.1"  
Up to 6x CCS2

- 4 DPU-600/720  
power units  
HCD-500  
dispensers



**600 / 720 kW**  
distributed DC  
with **500A**  
**dispensers**

Screen: 10.1"  
Up to 12x CCS2

- 5 1.5MW  
Power Unit



**1,500 kW**  
distributed DC

Screen and  
connectors  
TBC

**ON THE PRODUCT  
ROADMAP**

Source: Motion Applied; Note1: 1.5 MW DC charging capable of charging 300kWh in 15 minutes