

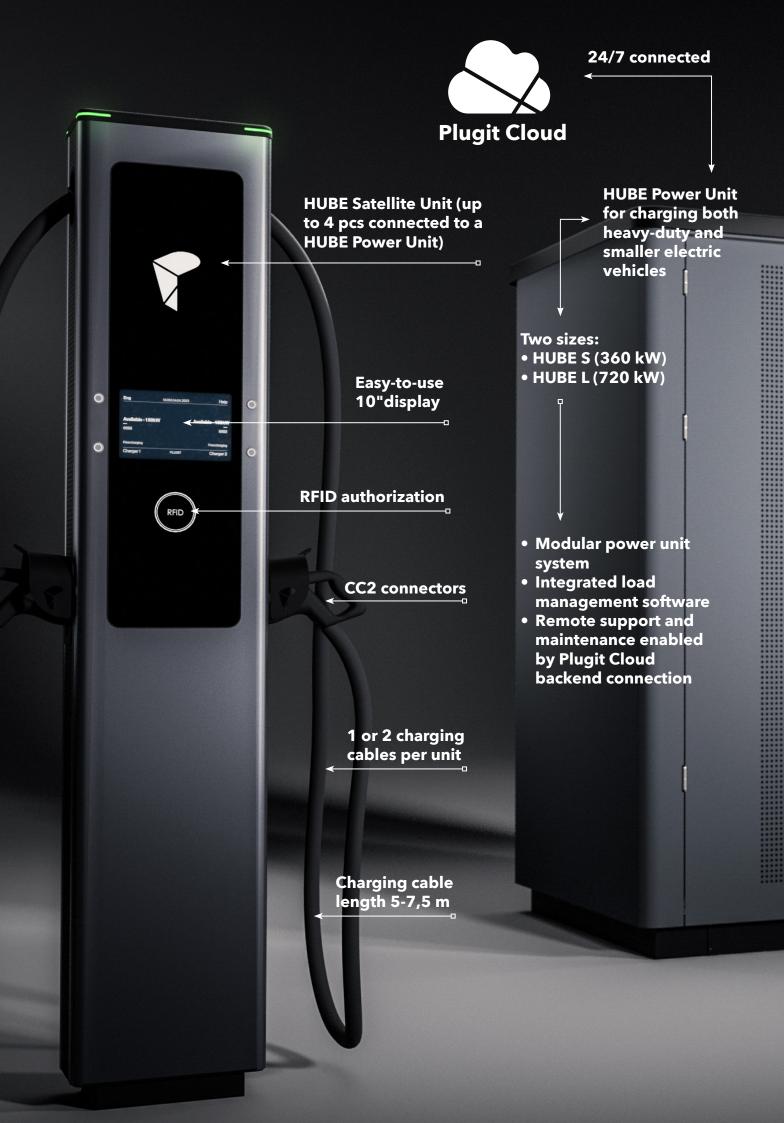




## **HUBE S** 360 kW **HUBE L** 720 kW

The intelligent scalable DC charging solution with up to 8 charging connectors







#### SCALABILITY Choose HUBE size and number of satellites based on your charging needs - max. 8 charging connectors in one HUBE L.



### OPTIMAL ENERGY USAGE

Avoid power overload and expensive charging hours with intelligent dynamic load balancing.



## CONNECTIVITY

Plugit specialists are able to follow charging sessions, support users and solve problems in real time.



### OPTIMIZED FOR HEAVY DUTY HUBE is designed for businesses where

for businesses where up-time, reliability and constant high power are key requirements.



QUARANTEED POWER PER PLUG Full power is available from each and every plug at all times, enabling accurate scheduling and planning for heavy-duty

vehicles.



### SERVICE OFFERING Plugit offers preventive maintenance and service level agreements to cover the whole lifecycle of HUBE charging system.

## HUBE = Power Unit + Satellites + Software + Services

Plugit HUBE is the intelligent scalable DC charging system for both heavy-duty and smaller electrical vehicles. Whether your need is to charge maximum power to few electric trucks or share all the available power for up to 8 passenger EV's, Plugit HUBE is a turnkey solution for various use cases including logistics centers, bus depots, parking lots and service stations.

As one of the pioneers in the Nordic EV industry, Plugit has over 10 years of experience in installing, operating and servicing chargers from other manufacturers. Plugit HUBE is built on this experience and knowledge - ease of use, installation and operations are our top priorities. Plugit charging solutions are manufactured in Finland and designed to last in challenging Nordic environments.

# **HUBE POWER UNIT**

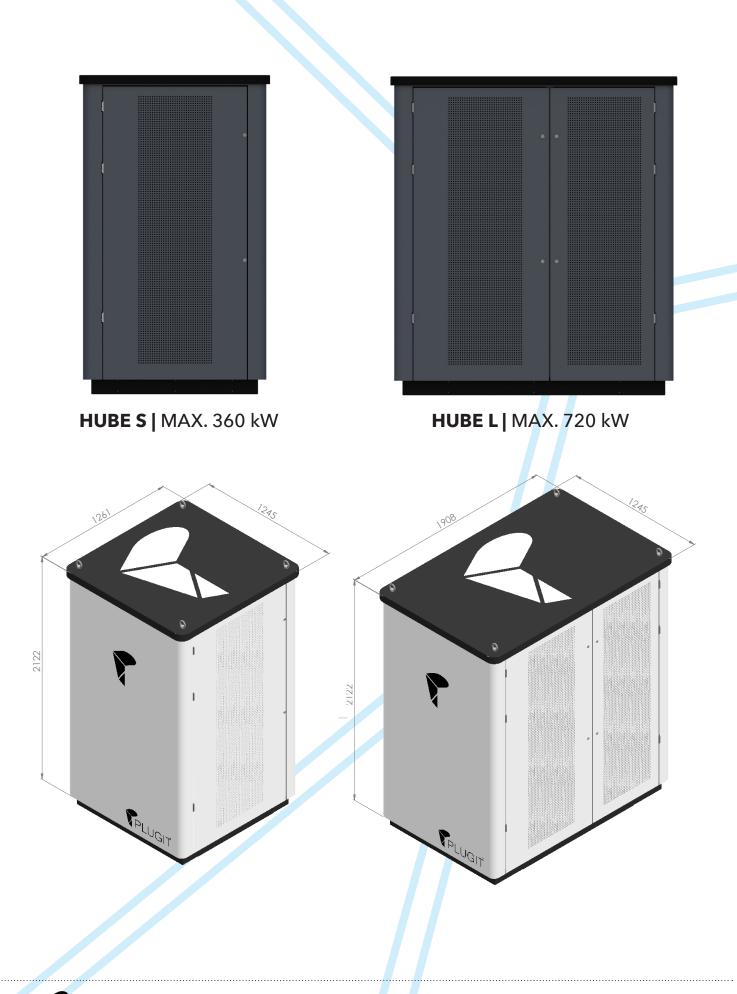
HUBE power unit is the core of high-power DC charging solution. The power unit provides a maximum available charging power of either 360 kW (HUBE S) or 720 kW (HUBE L) for the whole system. If the full available power is not needed from the day one, Plugit HUBE L power unit can be installed with fewer power modules enabling the later power upgrade.

Software and services are an integral part of the HUBE system. HUBE comes with an integrated dynamic load balancing software that ensures optimal charging power at all times, avoiding power overload and possible peak-hour fees. The connection to Plugit back-end enables end user invoicing and remote support. On top of the standard 2-year warranty Plugit provides maintenance service and service level agreements to cover the whole lifecycle of HUBE charging system.

	HUBE S	HUBE L
Max. power	360 kW	720 kW *
Max. number of connected satellites	2 (180 kW) / 1 (360 kW)	4 (180 kW) / 2 (360 kW) / 4 (360 kW)**
Size, mm (W x H x D)	1261 x 2122 x 1245	1908 x 2122 x 1245
Color	Grey (RAL 7024)	

\* Optionally can be delivered with max. power of 360/540 kW that can be upgraded later to 720 kW.

\*\* Requires specific configuration. If 4 vehicles are charging simultaneously, max. power per satellite is 180 kW.



# **HUBE SATELLITE**

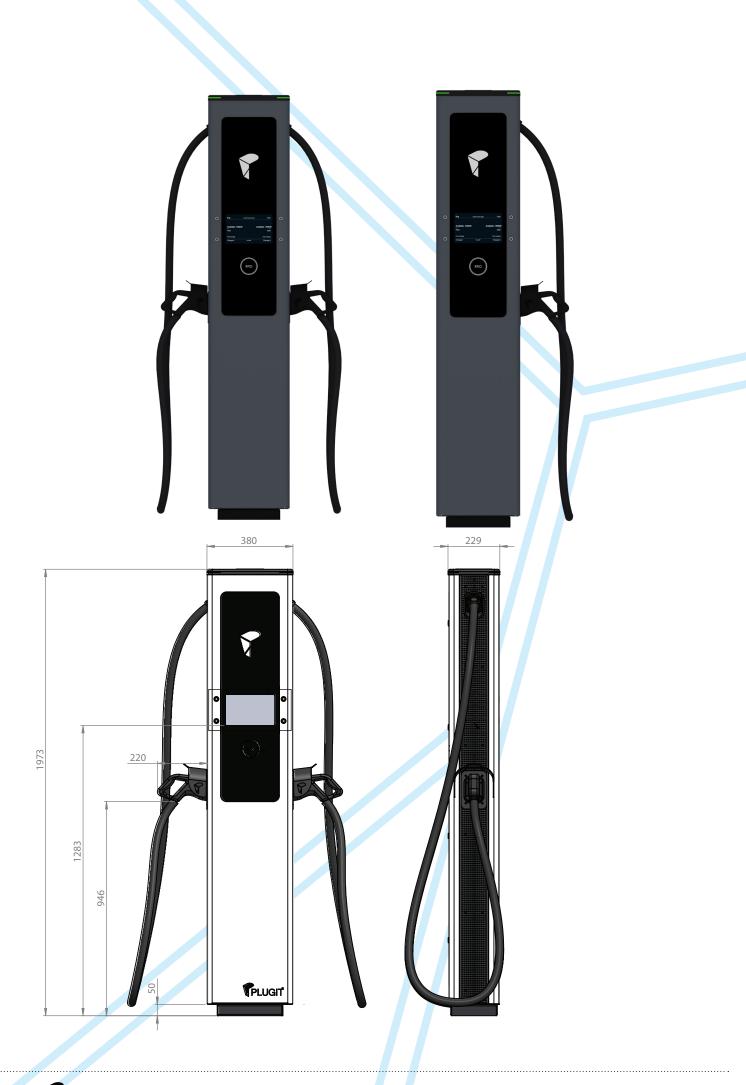
# HUBE satellite delivers charging power from the HUBE power unit to electric vehicles. One output can provide power up to 360 kW.

HUBE satellite is available with two different maximum powers: 180 and 360 kW. 180 kW satellite is designed for public charging, whereas 360 kW satellite also meets the charging needs of heavy-duty vehicles such as electric trucks. Up to 4 satellites can be connected to one HUBE L power unit providing max. 8 charging outputs in total.

Satellite-based charging solution provides flexibility to layout planning of the charging location. HUBE satellite is available with 1 or 2 CCS2 charging guns. If the satellite is delivered with two outputs, the maximum power (180 or 360 kW) is split in the two guns. The length of the charging cable can be either 5 or 7,5 m.

HUBE satellite includes an intuitive screen that guides the user through charging session. The satellite is available with certified DC energy meter, enabling accurate energy-based end user invoicing. With sleek, simple design HUBE satellites fit into various charging environments.

HUBE Satellite	HUBE Satellite 180 kW	HUBE Satellite 360 kW
Max. charging current	250 A per output	375/500 A per output (continuous/peak)
Charging power at 400 VDC	100 kW	200 kW (temperature controlled derating) 150 kW (continuous)
Charging power at 800 VDC	180 kW	360 kW (temperature controlled derating) 300 kW (continuous)
Charging outputs	1-2	
Connector	CCS2	
Cable length	5/7,5 m	
Certified DC energy meters	Available	
Size (W x H x D)	380 x 1973 x 229 mm	
Color	Grey (RAL 7024)	



## **TECHNICAL SPECIFICATIONS**

nput voltage	400 VAC +/- 10 %
Input frequency	50 Hz
Output voltage	150-1000 VDC
Power factor	>0.95
Efficiency	>94 % at optimized V/I point
Overvoltage category	
Network type	TN-S
Environmental specifications	
Operating temperature	-30 °C to +50 °C
Operating humidity	5 % to 95 % relative humidity, non-condensing
Cooling system	Air cooling fans
Enclosure rating	IP54/IK10
User interface and control, HUB	
Network interface	Ethernet, LTE/4G
Load management	Plugit ICMS (Intelligent Charging Management System)
User interface and control, HUB	E satellite
Display	10" TFT
Supported languages	Finnish, English, Swedish, German, Norwegian
Network interface	Via HUBE power unit
Authentication	RFID, Plugit back-end via OCPP
RFID system	HF (13.56 MHz)
OCPP protocol	OCPP1.6J
Electrical connections (between	HUBE power unit and satellites)
	u) (180 kW satellite with 1xCCS2) 2) (Cu) (180 kW and 360 kW satellite with 2xCCS2 connector) u) (360 kW satellite with 1xCCS2 connector)
Auxillary power 230V AC (MCMK	2x2,5+2,5)
Control bus cable (Ethernet, CATé	»)
Electrical protections, HUBE pov	wer unit
Over/undervoltage protection	
Surge protection	
Short circuit protection	
Overload protection	
Earth leakage current monitoring	
Device overtemperature	