

# **Kempower Liquid Cooled Satellite**

## The Kempower Liquid Cooled Satellite is the high-power DC charging system for heavy-duty electric vehicles.

As part of the Kempower advanced Satellite charging system, the Liquid Cooled Satellite is perfectly suited for on-route charging of medium and long-haul heavy-duty trucks.

It can be combined into a charging system including a Kempower Power Unit up to 600 kW, and a maximum of 8 Kempower Satellites or Pantographs. Exceeding the CharlN HP350 Power Class, the Liquid Cooled Satellite can provide continuous 500 A DC current over a long period of time, with up to 400 kW of charging power depending on the characteristics of the vehicle battery.

Like the other members of the Kempower Satellite family, the Liquid Cooled Satellite also features Kempower's advanced cable support system. Environmentally friendly cooling liquid Glysofor N is used in the cooling system of the Liquid Cooled Satellite.



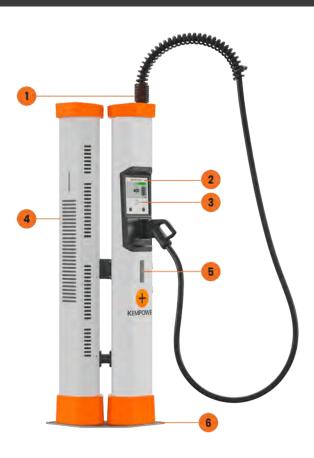
Power range

Up to  $400\,$  kW

Number of outputs

1-8

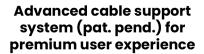




- 1 Charging cable support system
- 2 7" touch screen display
- 3 RFID reader (ISO 14443A)
- 4 Liquid-cooling unit
- 5 Energy meter window
- 6 Mounting flange

**Note:** Delivered with the coolant inside and the charging cable installed.







Flexible charging system topology design



Easy-to-use, intuitive user menu on a 7" touch screen display



Optimal solution for charging heavy electric vehicles



On-screen QR code for following the charging status on your mobile phone



Advanced charging control and customization with Kempower ChargEye



### Product code interpretation

STQ.C.5.F.S

Kempower Liquid Cooled Satellite • 1 x CCS2 connector • 5 m charging cable • 500 A liquid-cooled cable • standard user interface

Item	Code	Description	
Product type	STQ	Kempower Liquid Cooled Satellite	
Vehicle connector type	С	CCS2	
Charging cable length	5	5 m	
Nominal charging cable current	F	500 A (at ambient +25 °C)	
User interface and payment	S	Standard user interface	
Meter	М	Certified DC energy meter	
Equipment stop	Е	Equipment stop button	
Branding	C0	Unbranded: roof and base in black color, no stickers	

### General electrical specifications

Voltage	Max. 1000 VDC	
Standby power	25 W	
Charging power at 400 VDC	200 kW	
Charging power at 800 VDC	400 kW	
Recommended cooling liquid	Glysofor N, volume ca. 2.5 l (factory pre-filled)	

### **Environmental specifications**

Operating temperature	-30+50 °C	
Current derating	The maximum charging current decreases -1.5% for every 1 °C rise in temperature above +40 °C	
Maximum altitude without derating	2000 m	
Altitude derating	Decrease of -1.4% in the maximum charging current for every 100 m rise above 2000 m	
Operational noise level	< 60 dB at 1 m distance	
Storage temperature	-40+60 °C	
Ambient air humidity	< 95% relative humidity	
Enclosure rating	IP54, IK10	



## Connections and protocols (via Power Unit)

WiFi	802.11 b/g/n (2.4/5 GHz)	
Cellular/GPS	LTE-FDD, LTE-TDD, WCDMA, GSM	
Ethernet	RJ45, IEEE 802.3/802.3u	
OCPP	1.6j/2.0.1	
Connectivity	Kempower ChargEye solution	
CCS2	DIN 70121:2012, ISO 15118:2013, ISO 15118:2010	

### **Electrical protections**

Earth leakage current monitoring		
Vehicle connector pin temperature monitoring		
Liquid level monitoring		

### Compliance to standards

IEC 61851-1
IEC 61851-23
IEC 61851-21-2

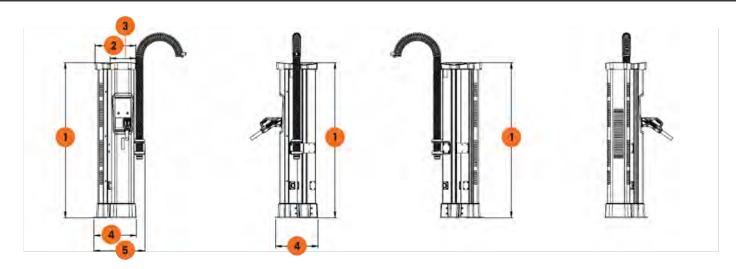
### **Options**

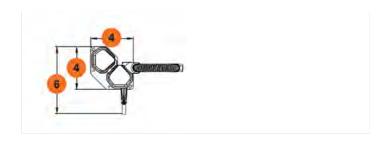
Equipment stop button
Integrated Class B energy meter

#### Mechanical dimensions

Size (W x H x D)	
570 x 1738 x 475 mm	
Weight	
Ca. 150 kg	







1 1738 mm 3 289 mm 5 570 mm 2 455 mm 4 475 mm 6 749 mm

Note: The maximum installation distance from the Power Unit is approximately 80 meters.

Note: Do not separate the frames. The DC input cables are routed to the frame with the user interface.