

**Technical Datasheet** 

# **Kempower Satellite**

**Version 2** 

The Kempower Satellite
DC charging system is the optimal solution for public charging and other sites that need multiple fast charging outputs.

The Satellites are connected to the Power Unit or Station Charger. One Power Unit can simultaneously provide energy for up to 8 DC charging outputs with 800 VDC systems and up to 6 outputs with Adaptive Voltage systems covering both 400 and 800 VDC charging.

The maximum available charging power of the system is 600 kW, depending on the Power Unit version. Each output can deliver 400 kW to the charging Satellite.

The Satellite is available with an integrated energy meter, showing the amount of energy the charger has provided after the start of the charging session.



Maximum charging power

Up to 400 kW

Number of Satellites in the system

1-8





- 1 Charging cable support system
- 2 7" touch screen display
- 3 RFID reader
- 4 Vehicle connector
- 5 Energy meter window
- 6 Mounting flange









Advanced cable support system for premium user experience



Kempower advanced charging Satellite system with up to 8 simultaneous charging outputs

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



Cabling distance between the Power Unit and Satellites up to 80 meters

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



**Advanced charging control** and customization with Kempower ChargEye



# Product code interpretation

ST-C-5-C-S-M-C0

Kempower Satellite Version 2 • 1 x CCS2 connector • 5 m charging cable • 200 A cable current • standard user interface • DC energy meter • unbranded

Item	Code	Description				
Product type	ST	Kempower Satellite Version 2				
Vehicle connector type	С	CCS2				
	CC	2 x CC\$2				
	CD	CCS2 & CHAdeMO				
	Χ	CCS2/CHAdeMO Allows up to 16 outputs per Power Unit, max. 8 outputs charging simultaneously				
Charging cable length	5	5 m				
	7	7 m				
Nominal charging cable current	В	125 A (CHAdeMO)				
	С	200 A (CCS2)				
	D	250 A (CCS2)				
	E	300 A/500 A <sup>[1]</sup> (CCS2)				
User interface and	S	Standard user interface				
payment	0	Payter Apollo: Contactless payment with online PIN entry and verification				
	Р	Payter P66: Only contactless payments, no strong customer authentication (SCA) possibility				
	W	Worldline Valina: Contactless payment with online PIN entry and verification, chip and magnetic stripe reader				
Meter	М	Certified DC energy meter				
Equipment stop	E	Equipment stop button				
Branding options	C0	Unbranded: roof and base in black color, no stickers				
	Cn	Branded: number (n) indicates branding, e.g. C8				

<sup>[1] 500</sup> A (max. 10 min) in +25 °C with a single charging output (only single cable satellite). Requires at least 3 output terminals connected together at the Power Unit, and a specific hardware configuration.

375 A (continuous) in +25 °C with double charging outputs or vehicle connector type X. Requires at least 2 output terminals connected together at the Power Unit, and a specific hardware configuration.

# General electrical specifications

DC charging connector options	CCS2 IEC 62196-3, CHAdeMO		
Voltage	Max. 1000 VDC		
Standby power	25 W		



# **Environmental specifications**

Operating temperature	-30+50 °C
Derating	Charging cable pin temperature limits charging current. For other limiting variables, see the applicable Power Unit datasheet.
Storage temperature	-40+60 °C
Ambient air humidity	< 95% relative humidity
Enclosure rating	IP54, IK10 (IK09 for the payment terminal)

# Connections and protocols (via Power Unit or Station Charger)

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
CHAdeMO	0.9/1.0
Authentication methods	RFID: ISO 14443A, ISO 15693, ISO 14443B (STM SRI512)
	Customer backend via OCPP
	Payment terminal
	AutoCharge
	ISO 15118-2 Plug & Charge

# Electrical connections (between Satellite and Power Unit)

DC power cable per vehicle connector (terminals 2 x 150 mm² per pole)				
Control cable 24 VDC				
Control bus cable				

# **Electrical protections**

Vehicle connector pin temperature monitoring



#### **Product codes**

Product code	Charging outputs	Vehicle connector	Simul. charging with 2 outputs	Max. charging current	Charging power at 400 VDC	Charging power at 800 VDC	Weight
Product code:	s with 5 m ch	arging cables					
ST•C•5C•S	1	CCS2	N/A	200 A	80 kW	160 kW	76 kg
ST•C•5D•S	1	CCS2	N/A	250 A	100 kW	200 kW	104 kg
ST•C•5E•S	1	CCS2	N/A	300 A/ 500 A <sup>[1]</sup>	120 kW/ 200 kW	240 kW/ 400 kW	109 kg
ST•CC•5C•S	2	2 x CCS2	Yes	2 x 200 A	2 x 80 kW	2 x 160 kW	109 kg
ST•CC•5D•S	2	2 x CCS2	Yes	2 x 250 A	2 x 100 kW	2 x 200 kW	164 kg
ST•CD•5CB•S	2	CCS2 & CHAdeMO	Yes	200 A & 125 A	80 kW & 50 kW	160 kW & 100 kW	106 kg
ST•CD•5DB•S	2	CCS2 & CHAdeMO	Yes	250 A & 125 A	100 kW & 50 kW	200 kW & 100 kW	134 kg
ST•CD•5EB•S	2	CCS2 & CHAdeMO	Yes	300 A/ 375 A <sup>[1]</sup> & 125 A	120 kW/ 150 kW & 50 kW	240 kW/ 300 kW & 100 kW	139 kg
ST•X•5EB•S	2	CCS2/ CHAdeMO	No	300 A/ 375 A <sup>[1]</sup> & 125 A	120 kW/ 150 kW & 50 kW	240 kW/ 300 kW & 100 kW	139 kg

<sup>[1] 500</sup> A (max. 10 min) in +25 °C with a single charging output (only single cable satellite). Requires at least 3 output terminals connected together at the Power Unit, and a specific hardware configuration.

375 A (continuous) in +25 °C with double charging outputs or vehicle connector type X. Requires at least 2 output terminals connected together at the Power Unit, and a specific hardware configuration.

Note: Versions with 7 m charging cables: Change 5 to 7 in the product code, e.g. from STC5CS to STC7CS. Add 2 kg to the weight.

Note: Versions with a payment terminal: Change S to O or P or W in the product code, e.g. STC5CS to STC5CO or STC5CP or STC5CW.

Note: Versions with DC energy meters: Add M in the product code, e.g. STC5CSM.

# Compliance to standards

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

# **Options**

Payment terminal	Payter Apollo: Contactless payment with online PIN entry and verification		
	Payter P66: Only contactless payments, no strong customer authentication (SCA) possibility		
	Worldline Valina: Contactless payment with online PIN entry and verification, chip and magnetic stripe reader		
Equipment stop button			
Customized branding	Branding options, such as custom colors and stickers Contact Kempower for availability, pricing, and minimum order quantity		

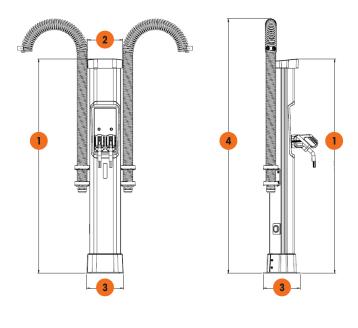


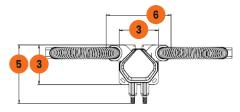
### Mechanical dimensions

Size (W x H x D)

300 x 1738 x 300 mm

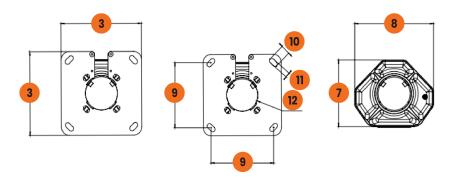
#### Satellite with two DC charging outputs





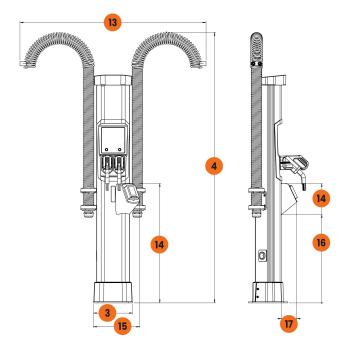
Footprint of standard installation flange

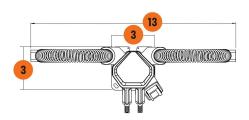
Footprint with mounting tube





# Satellite with two DC charging outputs and payment terminal





1	1738 mm	6	493 mm	11	18 mm	16	675 mm
2	289 mm	7	239 mm	12	120 mm	17	115 mm
3	300 mm	8	294 mm	13	1420 mm		
4	21002400 mm	9	240 mm	14	911 mm		
5	444 mm	10	36 mm	15	354 mm		

