Konect

Distributed 600 kW Fast Charging System

Technical Specifications













Kønect

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Discover the future of EV charging with our cutting-edge distributed 600kW fast charging system that boasts the fastest and most efficient charging capabilities on the market today. Delivering up to 400kW power output per connector, it enables simultaneous charging for up to four vehicles that offer 100 miles or 160 kilometers of range within 5 minutes of charging.

The distributed 600kW fast charging system simplifies maintenance with its modular design and captivates users with a durable 32-inch LCD screen that supports both interaction and advertising, ensuring reliability and quality.



Technical Specifications

This document provides technical specifications for the distributed 600kW Fast Charging System, comprising two 400 kW dispensers and a 600kW power unit:



400 kW Dispenser

600kW Power Unit



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Dispenser Specifications

	North America	Europe	
Input			
Nominal Power	400 kW		
Input Voltage Range	200 Vdc ~ 1,000 Vdc for Charging, 277Vac for Control (200 W)	150 Vdc ~ 1,000 Vdc for Charging 277Vac for Control (200 W)	
Max. Current	50	500 A	
Output			
Nominal Power	400 kW		
Operating Voltage Range	200 Vdc ~ 1,000 Vdc	150 Vdc ~ 1,000 Vdc	
Max. Current	CCS1 (Liquid Cooled) 500 A or NACS(Liquid Cooled) 500 A	CCS2 (Liquid Cooled) 500 A	
Metering Accuracy	>99%		
Power Sharing Charging Scenario	Active Power Sharing, 50kW increments, Simultaneous charging		
User Interface	32-Inch touch screen (FHD 1920x1080) 3 Operation Buttons Emergency Stop Button		
Control Interface Protocol	OCPP 1.6J (Core : Supported), OCPP2.0.1 (Core : Supported)		
Charging Interface Protocol	DIN70121, ISO15118-2 (PnC)		
User Authentication	RFID (ISO/IEC14443 A/B, ISO15693), NFC, IC Reader		
Payment Terminal	Invenco by GVR FlexPay 6 A2-05		
Network Connection	Ethernet, 4G, LTE Modem		
General			
Dimensions (W x D x H)	700 x 550 x 2,050 mm		
Weight (with mounting plate)	320 kg		
Operating Temperature Range	-35°C to +55°C (with derating @45°C) / -31°F to +131°F		
Storage Temperature Range	-40°C to +70°C ∕ -40°F to +158°F		
Cooling Method	Forced Air Cooling		
Max. Operating Altitude	2,000m (6.561ft)		
Relative Humidity	5~95 % (Non-condensing)		
DC Cable (2ea)	CCS1/CCS1 or CCS1/NACS	CCS2/CCS2	
	Length : 5.5m (Outside Length = Ethernet Cable + Connector head), Cable Management		
Operating Noise	< 70dB @ 1m		
Protection	Over Temperature, Over Voltage, Over Current, Proximity Loss, FG Disconnection Detect, DC Surge, & Insulation Monitor & Protection, IP55 NEMA 3R, IK10 (Touch screen, IK08)		
Standards Compliance	NRTL (UL), FCC Part 15, UL2202, UL2231-1, UL2231-2, UL991, UL1998, CSA, Energy Star, CTEP (NTEP), ADA, IEC 61851-23, IEC 61851-24	CE, EMC, IEC61851-23, IEC61851- 24	
	*CTEP/NTEP Certified with current SW.		



Power Unit Specifications

	North America	Europe
Input		
Nominal AC Power	632 kW	
Nominal Input Voltage	AC480V±10% / 3P4W(R,S,T,N)+PE	AC400V±10% / 3P4W(R,S,T,N)+PE
Rated AC Grid Frequency	50 Hz / 60 Hz	
Max. Current	≤ 760 A	≤ 912 A
Adjustable Power Factor Range	≥ 0.99 (@ Load 100%, AC480V±10%)	≥ 0.99 (@ Load 100%, AC400V±10%)
Efficiency		
Max. Efficiency	≥ 95% (@ Load 100%)	
Output		
Nominal Output Power	600 KW	
Operating Voltage Range	200 Vdc ~ 1,000 Vdc	150 Vdc ~ 1,000 Vdc
Max. Current	2,000 A	
Power Sharing Charging Scenario	Active Power Sharing, 50kW increments	
General		
Dimensions (W x D x H)	1,750mm x 1,000mm x 2,150mm	
Weight (with mounting plate)	1,200 kg	
Operating Temperature Range	-35°C to +55°C (with derating <code>@45°C</code>) / -31°F to +131°F	
Storage Temperature Range	-40°C to +70°C ∕ -40°F to +158°F	
Cooling Method	Forced Air Cooling	
Max. Operating Altitude	2,000m (6,561ft)	
Relative Humidity	5 ~95 % (Non-condensing)	
Protection	Over Temperature, Over Voltage, Over Current, AC Surge, NEMA 3R, IK10	
Operating Noise	< 70dB @ 1m	
Standards Compliance	NRTL (UL), FCC Part 15, UL2202, UL2231-1, UL2231-2, UL991, UL1998, CSA, Energy Star, IEC 61851-23, IEC 61851-24	CE, EMC

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Electrifying futures.

Find out how your forecourt or fleet depot could benefit from our end-to-end EV charging ecosystem solutions.

Europe:www.gilbarco.com/eu/North America:www.gilbarco.com/us/



