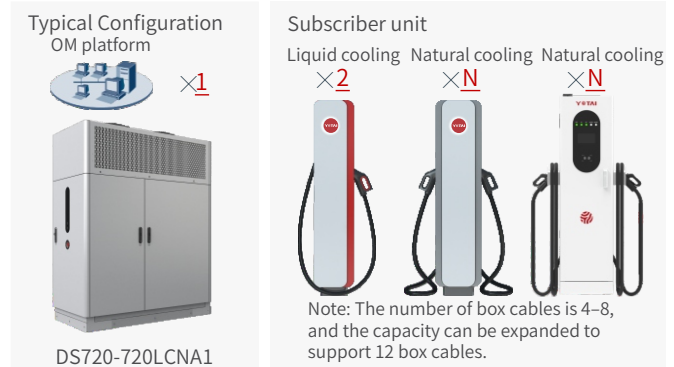


Liquid-cooling Superfast Charger

DS720-720LCNA1

Product Brief

The DS720-720LCNA1 is designed based on fully liquid-cooling superfast charging architecture. Compared with traditional solutions, the DS720-720LCNA1 adopts new liquid-cooling technology and DC bus architecture, which consists of two parts: power unit and subscriber unit. The power unit is used for energy conversion and power distribution that can be expanded to support 720 kW power output (full configuration) with a built-in 120 kW WAC/DC and 60 kW W DC liquid cooling module and power sharing unit. It can be expanded to support 12-channel output (full configuration).



Product Features

Ultimate experience	Extremely high quality	Excellent benefits
Charge quickly and quietly	Long service life and maintenance-free	More charge and quick turnover
1 km/sec, noise < 55 dB	Up to 20 year service life	30% more charge, doubling the turnover rate
You can charge it, you don't pick a car	Smart maintenance, less labor	High efficiency and low energy consumption
One-time charging success rate: 99% +	All-online O&M, "zero" maintenance	E2E efficiency: 95.5%
Light gun is easier to handle	No liquid leakage, no electric leakage	Easy capacity expansion and integrating PV&ESS
One-handed operation, 55% weight reduction	Transport with plate and liquid, water and electricity isolation design	Continuous evolution, without changing the mains supply

Application Scenario


Urban public scenario



Intercity charging scenario






Specifications

Product Diagram		
Basic Information	Product Model	DS720-720LCNA1
	Dimensions (W x D x H)	800 *1700 * 2150mm
	Installation mode	Floor-mounted installation (supporting transportation with plates and liquid)
	System efficiency	95.5% Maximum efficiency 95.5%
	Rated power	600kW
	Heat Dissipation Mode	Liquid cooling
	Protection grade	IP55
	Number of supported guns	4-12
Communication interface		4G and FE (northbound)
Input characteristics	Input Voltage	380Vac±15%, three-phase five-wire system
	Input frequency	45Hz~66Hz
	Power factor	≥0.99 (load≥50%)
	Harmonics	≤5% (load≥50%)
	Input power distribution	AC 800 A x 3P circuit breaker; Two incoming cables for a single transformer (per 360 kW per input)
Output characteristics	Output Voltage	200-1000Vdc
	Steady current precision	≤ ±1%
	Regulated voltage precision	≤ ±0.5%
Environmental Specifications	Operating temperature	-35°C~+50°C
	Storage temperature	-35°C~+70°C
	Altitude	≤2000m
	Relative Humidity	5%RH~95%RH
	Noise level	≤ 55 dB@25°C (silent mode) , ≤ 65 dB@25°C (standard mode)
Security Function	Input overvoltage protection, undervoltage protection, output overvoltage protection, constant power overload protection, short circuit protection, grounding protection, overtemperature protection, lightning protection, emergency stop protection, leakage protection, insulation detection, door opening protection, battery reverse connection protection, relay adhesion protection, and water protection 2. Smoke alarm	
Product specification	GB/T18487.1-2015, NB/T33001-2018, NB/T33008.1-2018	
Host terminal Communication interface	FE, ring network recommended, shielded twisted pair FTP Cat5E	
Host terminal Communication protocol	GOOSE+MODBUS-TCP	
Auxiliary power supply standard	220 V AC auxiliary power output	



Security Function	Input overvoltage protection, undervoltage protection, output overvoltage protection, constant power overload protection, short circuit protection, grounding protection, overtemperature protection, lightning protection, emergency stop protection, leakage protection, insulation detection, door opening protection, battery reverse connection protection, relay adhesion protection, and water protection 2. Smoke alarm
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Host terminal Communication protocol	GOOSE+MODBUS-TCP
Auxiliary power supply standard	220 V AC auxiliary power output

Subscriber unit specifications

Product Diagram				
Basic Information	Product Model	DT600L1-CNA1	DT250N2-CNA1	YT terminal
	Dimensions (W x D x H)	340*295*1700	390*295*1700	430*1600*200
	Number of charging guns	1	2	2
	Length of the gun line	3.5m	5m	5m
	Installation Mode	Floor installation	Floor installation	Floor installation
	Protection grade	IP55	IP55	IP54
	Heat Dissipation Mode	Liquid cooling	Natural cold	Natural cold
Environmental Requirements	Operating temperature	-35~+50°C	-35~+50°C	-20~+50°C
	Noise level	≤55dB@25°C	≤50dB@25°C	≤50dB@25°C
	Storage temperature	-35°C~+70°C	-35°C~+70°C	-35°C~+70°C
	Relative Humidity	5%RH~95%RH	5%RH~95%RH	5%RH~95%RH
	Altitude	≤2000m	≤2000m	≤2000m
Output Characteristics	Output Voltage	200~1000Vdc	200~1000Vdc	200~1000Vdc
	Charging current	600 A maximum	250A	360A
Product Specification	GB/T27930-2015、JG1149-2022	GB/T18487.1-2015、NB/T33001-2018、NB/T33008.1-2018、GB/T27930-2015、JG1149-2022	GB/T18487.1-2015、NB/T33001-2018、NB/T33008.1-2018、GB/T27930-2015、JG1149-2022	
Security Function	Output overvoltage protection, short circuit protection, protection grounding continuity detection, overtemperature protection, emergency stop protection, leakage protection, insulation detection, door opening protection, power failure protection, battery reverse connection protection, contactor adhesion protection, and low liquid level alarm			

