SUNGROW
Clean power for all

IDC480E

240/360/480kW Isolated air-cooled ultra-fast charging system

RELIABLE AND SAFE

- Power cabinet with innovative isolated air-cooled technology
- IP65 protection and C5 anti-corrosion
- Long lifespan over 10 years
- Self-designed and own-manufactured power modules
- Carefree maintenance without replacing dust filter mat and cooled liquid in power cabinet
- Eco-friendly with degradable fluid for liquid-cooled dispenser

USER FRIENDLY

- Adaptive voltage range 200-1000 Vdc
- Supports multiple authentication and payment options
- Spring-assisted cable management system for premium user experience
- Barrier-free design for easy access

FLEXIBLE APPLICATION

- Flexible configuration of dispensers, serving up to 8 vehicles simultaneously
- Compatibility with PV-ESS system reserved

EFFICIENT AND SMART

- Max. 480 kW ultra fast charging
- Max. efficiency up to 96.5 %
- Dynamic power allocation by 30 kW granularity
- No power losses with liquid pump in power cabinet



Model	480kW Power Cabinet	360kW Power Cabinet	240kW Power Cabinet
AC input			
Grid voltage	3 / N / PE, 360 - 440 Vac		
Nominal grid frequency	50 Hz / 60 Hz		
Rated input current	770 A	577 A	385 A
Power factor	≥ 0.99		
Standby power	≤ 30 W		
Earthing system	TN-C, TN-S, TN-C-S, TT		
Total harmonic distortion (THDi)	< 5 % at full output power		
Over voltage category	III		
DC output			
Max. output power	480 kW	360 kW	240KW
Output voltage range	200 Vdc - 1000 Vdc		
Max. output current	1600 A	1200 A	800 A
Number of output	Max. 8		
Max. efficiency	96.5 %		
General data			
Dimensions (W * H * D)	900 mm * 2200 mm * 1380 mm		
Weight	Cabinet (empty): 697 kg Module: 28 kg		
Operating temperature	-35 °C ~ 55 °C		
Operating humidity range	5 % - 95 % (non-condensing)		
Operating altitude	≤ 2000 m		
Noise (typical)	≤ 65 dB (A) at 1 m distance / 25 °C, at full output power		
Mechanical impact protection	IK10 (HMI is IK08)		
Enclosure rating	IP65		
Anti-corrosion degree	C5		
Communication			
Communication interface	WLAN / 4G / Ethernet		
Communication protocol (charger-to-CSMS)	OCPP 1.6J & OCPP 2.0.1 (coming soon)		
User interface			
Emergency stop	Yes		
Display	LED indicator		
Protection			
Over / Under voltage protection	Yes		
Overload protection	Yes		
Over temperature protection	Yes		
Leakage current protection	Yes		
Surge protection	Yes		
Short-circuit protection	Yes		
Certification and standards			
Certifications	CE ,CB , RCM , PEA , UKCA , Eichrecht		
Compliance	ETSI / EN 300 328, EN 300 330, EN 301 489-1 / 3 / 17 / 52, ETSI / EN 301 908-1 / 13, EN 50665, BS / EN IEC 61851-1, BS / EN IEC 61851-21-2, BS / IEC EN 61851-23 / 24, EN IEC 62311		
Warranty	3 years (standard)		

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Model	Air-cooled dispenser-240kW	Air-cooled dispenser-480kW	Liquid-cooled dispenser
DC output			
Cable configuration	Dual cable / Single cable (optional)	Single cable	Single cable
Cable connection options	400 A + 400 A	400 A	500 A
Max. output power (Per connector)	240 kW	480 kW	480 kW
Max. output current	600 A (boost)	600 A (boost)	600 A (boost)
Output voltage range	200 Vdc - 1000 Vdc		
Connector type	CCS2		
Communication to EV	DIN 70121, ISO 15118		
Standby power consumption	≤ 35 W		
General data			
Dimensions (W * H * D)	430 mm * 1800 mm * 330 mm	520mm * 1800 mm * 330 mm	520mm * 1800 mm * 330 mm
Weight	≤ 162 kg	≤ 125 kg	≤ 128 kg
Cable length	5 m / 7 m (optional)	5 m / 7 m (optional)	5m
Operating temperature range	-35 °C ~ 55 °C	-35 °C ~ 55 °C	-30 °C ~ 50 °C
Operating humidity range	5 % - 95 % (non-condensing)		
Operating altitude	≤ 2000 m		
Operating noise level	≤ 60 dB (A) at 1 m distance / 25 °C, at full output power		
Mechanical impact protection	IK10（HMI is IK08)		
Enclosure rating	IP65		
Anti-corrosion degree	C5		
User interface			
User authentication	RFID-card / Plug & play / Auto-charge / Plug & charge / Payment terminal		
Display	10-inch color touch screen		
RFID system	ISO / IEC 14443 A / B & ISO / IEC 15693 / NFC		
Energy meter	Support CE / MID / PTB meter		
Emergency button	Yes		
LED Display	Yes		
Cable management system	Yes		
Firmware update	OTA update		
Multilanguage system	English（Support customizing other languages)		
Protection			
Over / Under voltage protection	Yes		
Overload protection	Yes		
Over temperature protection	Yes		
Leakage current protection	Yes		
Short circuit protection	Yes		
Certification and standards			
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