

IDC180E

60/120/150/180kW Isolated air-cooling fast DC charger



RELIABLE AND SAFE

- IP65 protection and C5 anti-corrosion
- Long lifespan over 10 years
- Carefree maintenance without replacing dust filter mat
- Self-designed and own-manufactured power modules



USER FRIENDLY

- Supports multiple authentication and payment options *
- Charging cable management system for premium user experience



FLEXIBLE APPLICATION

- Adaptive voltage range 200-1000Vdc
- Compatibility with PV-ESS system reserved



EFFICIENT AND SMART

- Max. efficiency up to 96.5%
- Dynamic load management to optimize EV charging



Technical data		IDC180E
Charging connector		
Connector type		Outlet #1: CCS2 Outlet #2: CCS2
Number of EV served		2
Cable length		5 m (standard) 7 m (optional)
Cable management system		Yes
EVSE-vehicle protocol		DIN SPEC 70121 ISO 15118
DC output		
DC output power **		Max. 180 kW *1 or 90 kW *2 Max. 150 kW *1 or 60 kW + 90 kW Max. 120 kW *1 or 60 kW *2 Max. 60 kW *1 or 30 kW *2
DC output voltage		200 Vdc - 1000 Vdc
DC output current		Outlet #1: CCS2 250 A or 380 A (optional) Outlet #2: CCS2 250 A or 380 A (optional)
AC input		
Grid voltage		3 / N / PE, 380 Vac / 400 Vac (± 10 %)
Nominal grid frequency		50 Hz / 60 Hz
Earthing system		TN-C / TN-S / TN-C-S / TT
Rated input current		289 A at DC output power 180 kW 241 A at DC output power 150 kW 193 A at DC output power 120 kW 96 A at DC output power 60 kW
Power factor		≥ 0.99
Total harmonic distortion (THDi)		< 5 % at full output power
Overvoltage category		III
Standby self-consumption		≤ 48 W
Efficiency		
Max. efficiency		96.5 %
Protection		
Overload protection		Yes
Over/under voltage protection		Yes
Over-current protection		Yes
Short-circuit protection		Yes
Leakage current protection		Yes
Over-temperature protection		Yes
Surge protection		Yes
Emergency stop		Yes
User interface		
Display		10-inch color touch screen
Language		English (standard) Other languages available by firmware upgrade
Authentication		RFID-card / Plug & play / Auto-charge (standard) Plug & charge / Debit or credit-card (optional)
Firmware update		OTA (over-the-air) by iEnergyCharge
RFID system		ISO / IEC 14443 A / B ISO / IEC 15693
Energy metering		MID-certified meter integrated Eichrecht / PTB-certified meter integrated (optional)
Communication interface		WLAN / Ethernet / 4G
Communication protocol (charger-to-CSMS)		OCPP 1.6J Ready for OCPP 2.0.1
Mechanical data		
Dimensions (W*H*D)		930 mm * 2030 mm * 615 mm
Weight		≤ 500 kg ***
Installation method		Floor mounted
AC cable specification		Max. 240 mm ²
Environmental data		
Enclosure rating		IP65
Anti-corrosion degree		C5
Mechanical impact protection		IK10 ****
Operating ambient temperature range		-35 °C to 55 °C
Allowable relative humidity range		5 % – 95 % (non-condensing)
Max. operating altitude		≤ 2000 m
Cooling method		Smart forced air cooling
Noise (typical)		≤ 65 dB (A) at 1 m distance / 25 °C , at full output power
Certification and standards		
Certifications		CE, CB, UKCA, RCM, ADQCC, MoIAT, PEA, SASO, MEW
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)

* Payment terminal is an optional feature. Please consult Sungrow for more information.

** The output power of IDC180E is configurable at power modules level.

*** The weight varies from 380 kg up to 500 kg according to the quantity of power modules.

**** The mechanical impact protection degree of HMI is IK08.