SUNGROW
Clean power for all

IDC480E-C

# 240/320/360/400/480kW Isolated air-cooling ultra-fast compact DC charger

## RELIABLE AND SAFE

- IP65 protection and C5 anti-corrosion
- Long lifespan over 10 years
- Innovative Isolated air-cooling technology
- Self-designed and inhouse-manufactured power modules

## USER FRIENDLY

- Supports multiple authentication and payment options
- Arm cable management system
- Carefree maintenance without replacing dust filter mat

## FLEXIBLE APPLICATION

- Adaptive voltage range 150-1000Vdc
- Supports extension dispenser
- Compatibility with PV-ESS system reserved

## EFFICIENT AND SMART

- Max. efficiency up to 97%
- 40kW granularity for dynamic load management
- Maximum output capacity of each port up to 480kW

| Technical parameters | IDC480E-C |
|---|---|
| **Charging connector** | |
| Connector type | CCS2 |
| Number of EV served | Max. 4 |
| Cable type | Air cooling(all in one) <br> Air cooling or liquid cooling ( optional dispenser ) |
| Cable Length | 5 m ( standard ) <br> 7 m ( optional ) |
| Cable management system | Arm CMS |
| EVSE-vehicle protocol | DIN SPEC 70121 <br> ISO 15118 |
| **DC output** | |
| DC output power * | 240 kW、320 kW、360 kW、400 kW、480 kW |
| DC output voltage | 150 Vdc - 1000 Vdc |
| DC output current | 2 * 400A boost 600A ( all in one ) <br> 2 * 400A boost 600A or 1 * 500A boost 600A ( optional dispenser ) |
| **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 | 770 A at DC output power 480 kW |
| Power factor | ≥ 0.99 |
| Total harmonic distortion (THDi) | < 5 % at full output power |
| Overvoltage category | OVC III, DIN EN 60664-1 |
| Standby self-consumption | ≤ 70 W |
| **Efficiency** | |
| Max. efficiency | 97 % |
| **Protection** | |
| Integrated AC fault current detection | Yes |
| 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, Spanish, German, French, Dutch ( standard ) <br> Other languages available by firmware upgrade |
| Authentication | RFID-card / Plug & play / Auto-charge ( standard ) <br> Plug & charge / Debit or credit-card ( optional ) |
| Firmware update | OTA by iEnergyCharge <br> Web interface |
| RFID system | ISO / IEC 14443 A / B <br> ISO / IEC 15693 |
| Energy metering | MID-certified meter integrated <br> Eichrecht / PTB-certified meter integrated ( optional ) |
| Communication interface | WLAN / Ethernet / 4G |
| Communication protocol (charger-to-CSMS) | OCPP 1.6J <br> OCPP 2.0.1 ( coming soon ) |
| **Mechanical data** | |
| Dimensions (W*H*D) | 850 mm * 2300 mm * 950 mm |
| Weight | ≤ 950 kg |
| Installation method | Floor mounted |
| **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 |
| **Certification and standards** | |
| Certifications | CE, CB, UKCA, RCM, ADQCC, MoIAT, PEA |
| Compliance | ETSI / EN 300 328, EN 300 330, EN 301 489-1 / 3 / 17 / 52, ETSI / EN 301 908-1 / 13, EN 50665, <br> BS / EN IEC 61851-1, BS / EN IEC 61851-21-2, BS / IEC EN 61851-23 / 24, EN IEC 62311 |
| Warranty | 3 years ( standard ) |

| Technical parameters | Air-cooled dispenser | Liquid-cooled dispenser |
|---|---|---|
| **DC output** | | |
| Cable configuration | Dual cable / Single cable ( optional ) | Single cable |
| Cable connection options | 400 A + 400 A ( 600 A Boost ) | 500 A ( 600 A Boost ) |
| Output voltage range | 200 Vdc - 1000 Vdc | |
| Connector type | CCS2 | |
| Communication to EV | DIN70121, ISO15118 | |
| Standby power consumption | ≤ 35 W | |
| **General data** | | |
| Dimensions (W*H*D) | 430 mm * 1800 mm * 330 mm | 520 mm * 1800 mm * 330 mm |
| Weight | 140kg | 121 kg |
| Cable length | 5 m / 7 m ( optional ) | 5 m |
| Operating temperature range | -35 °C to 55 °C | -30 °C to 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** | |
| Enclosure rating | IP65 | |
| Anti-corrosion degree | C5 | |
| **User interface** | | |
| User authentication | RFID-card / Plug & play / Auto-charge / Plug & charge / Payment terminal  ( Optional ) | |
| Display | 10-inch color touch screen | |
| RFID system | ISO / IEC 14443A/B / ISO/IEC 15693 / NFC | |
| Energy meter | MID-certified DC energy meter / Eichrecht-certified DC energy meter (optional) | |
| Emergency button | Yes | |
| LED display | Yes | |
| Cable management system | Yes | |
| Firmware update | OTA update | |
| Multilanguage system | English Other languages available by firmware upgrade | |

* The output power of IDC480E-C is configurable at power modules level
**The mechanical impact protection degree of HMI is IK08