SUNGROW

SUNGROW Charging

PRODUCTS AND SYSTEM SOLUTIONS

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RE100 EP100

Charging

SUNGROW
Clean power for all

SUNGROW CHARGER

CHARGE OUR FUTURE

ABOUT SUNGROW

As a key high-tech enterprise in China, Sungrow Power Supply Co., Ltd. (Stock code: 300274) specializes in R&D, production, sales and services of new energy equipment, such as solar energy, wind energy, energy storage, hydrogen energy, electric vehicles, mainly provides photovoltaic inverters, wind energy converters, energy storage system, floating PV system, new energy automotive driving system, EV charging station, renewable hydrogen production system, smart operation and maintenance, and commits itself to providing first-class life cycle solutions of clean energy.

Since the establishment in 1997, the Company has been concentrating on the field of new energy power generation, adhering to market demand orientation, and taking technological innovation as the propellant for development. The Company has cultivated a professional R&D team with solid R&D experiences and strong capabilities of independent innovation. Sungrow has successively undertaken more than 20 national key science and technology programs, led the drafting of multiple national standards, and is one of the few companies in the industry that have mastered a number of independent core technologies.

Photovoltaic inverters, Sungrow's core products, have been accredited by TÜV, CSA, SGS, and other international authorities, and sold to more than 170 countries and regions in the world. Sungrow's cumulative installed capacity of Inverter & converter equipment across the world has been above 515GW by the end of December 2023.

The Company has successively won the awards of China Grand Awards for Industry, National Manufacturing Single Champion Demonstration Enterprise, Top 50 Innovative Chinese Companies, National Intellectual Property Demonstration Enterprise, Global Top 500 New Energy Enterprises, and Best Companies to Work For in Asia. Sungrow is a company with state-level post-doctoral research workstation, a national high-tech industrialization demonstration base, a national enterprise technology center, a national industrial design center, a national green factory, and ranks among the best in the global new energy power generation industry in terms of comprehensive strength.

In the future, Sungrow will adhere to its mission of "Clean power for all", accelerate the development of clean energy power generation system based on the new energy equipment business, innovate and expand new business in the field of clean power conversion technology, keep in close contact with the customers, actively participate in global competition, and strive to build itself into a trusted world-class company.

1997
Founded

2011
Listed on SZSE

13000+
40%+ R&D Personnel

100 TOP
Top 100 Global New Energy

100%
The World's Most Bankable Inverter Brand

RE 100
All Clean Energy Supply in 2028

SUNGROW Charging

SUNGROW Charging solutions are based on Sungrow 27 years of the experience in power electronics and the design and application of new energy equipment to develop and manufacture leading-edge electric vehicle charging equipment. SUNGROW Charging products are designed to meet the demand for efficient, stable, and safe charging in order to create more benefit and more revenue for clients.

SUNGROW Charging combines Sungrow Photovoltaic (PV) system and Energy Storage System (ESS) to provide an integrated Beyond Charging intelligent solution for charging stations, forming a closed loop of green energy and allowing electric vehicles to use renewable energy.

Lean Manufacturing

Comprehensive capacity of 140GW+, annual capacity of charger over 1GW

Sungrow headquarters factory provides shipments worldwide

Overseas factories with annual capacity of 25GW managing shipments to India and the United States market

Lean R&D and design create reliable products

Lean production process controls the details

Product Portfolio

SUNGROW Charging offers both DC and AC chargers, all equipped with the iEnergyCharge monitoring platform. These chargers can function independently or in conjunction with PV and ESS systems, forming Sungrow's Beyond Charging solution, suitable for a wide range of applications.

Additionally, Sungrow chargers feature advanced functions such as Adaptive Load Management (ALM), Dynamic Load Balance (DLB), and Dynamic Load Management (DLM) to ensure optimal power distribution and prevent overloads.

AC EV charging products

- AC22E-01 (cable version)

- AC22E-G2 (socket version)

- AC011E-01
  AC007E-01

- AC007UK-01
  AC007UK-01 L1

DC EV charging products

- IDC480E

- IDC180E

- IDC30E

Residential Beyond Charging solutions

AC EV chargers

- AC22E-01
- AC011E-01
- AC007E-01
- AC007UK-01

Energy management device

- iHomeManager

*G1: 1st Generation, G2: 2nd Generation

Hybrid inverters

- SH5.0/6.0/8.0 /10RT-20
- SH12/15/20/25T
- SH3.0/3.6/5.0/6.0RS

PV inverter

- SG5.0/6.0/7.0/8.0 /10/12RT-P2

Batteries

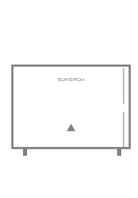
- SBR096/128/160 /192/224/256
- SBH100/150/200 /250/300/350/400

C&I Beyond Charging solutions

DC EV chargers

- IDC30E
- IDC180E
- IDC480E

EMS



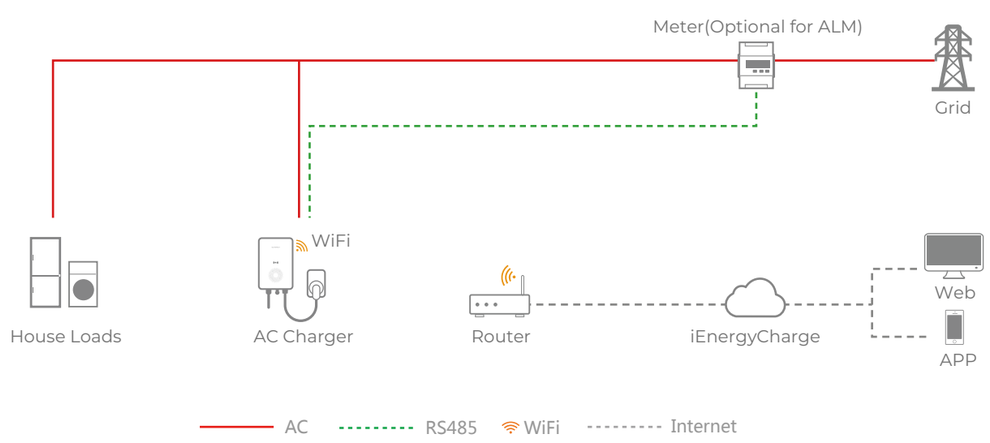
Energy storage system

Monitoring platforms / APPs

iEnergyCharge

iSolarCloud

Private: AC Charger 7/11/22kW Stand-alone Solution

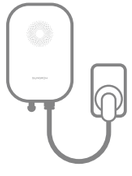


Recommended Products

AC Charger

AC007/011E - 01
AC007UK-01 L1

AC Charger



AC22E-01

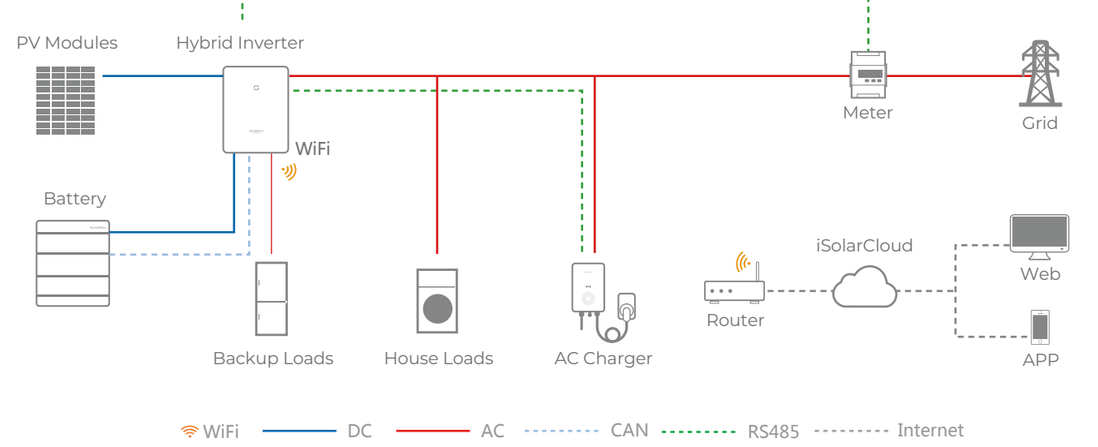
Meter (Optional for ALM)

One/Three-phase meter

Monitoring

iEnergyCharge

Private V1.0: AC Charger 7/11/22kW PV+ESS+Charger Solution



Recommended Products

AC Charger

AC007/011E-01
AC007UK-01

AC Charger

AC22E-01

Hybrid Inverter

SH3.0/3.6/4.0/
5.0/6.0RS

Hybrid Inverter

SH5.0/6.0/8.0/
10RT-20

Battery

SBR064/096/128/160/192/224/256
SBH100/150/200/250/300/350/400

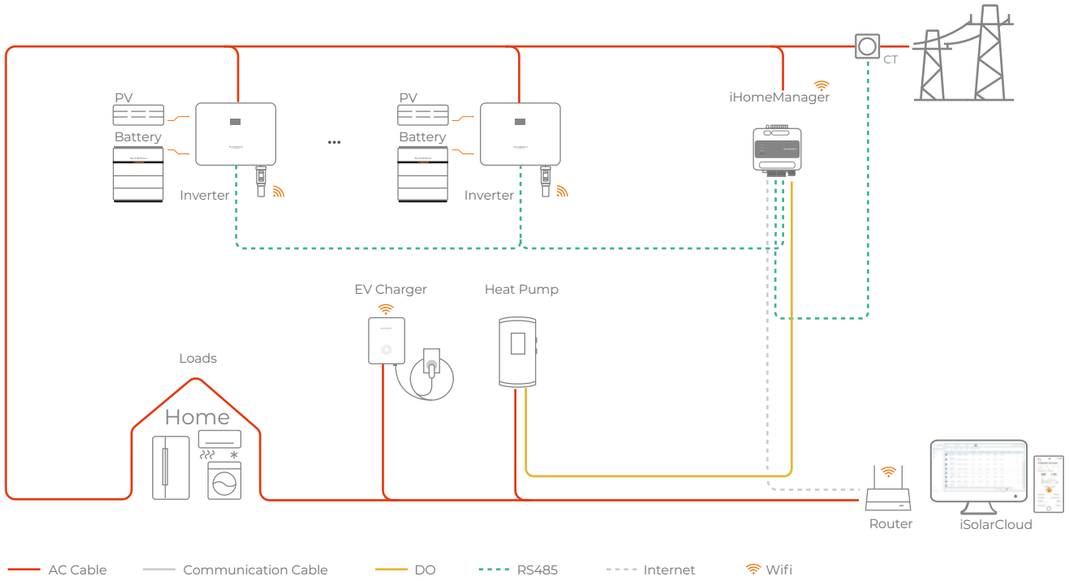
Meter (Optional for ALM)

One/Three-phase
meter

Monitoring

iSolarCloud

Private V2.0: AC Charger 22kW PV+ESS+Charger iHomeManager Solution



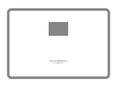
* The iHomeManager supports both wired and wireless communication with EV Chargers.

Recommended Products

AC Charger

AC22E-01

Hybrid Inverter



SH12/15/20/25T

Battery

SBH100/150/200/250/ 300/350/400

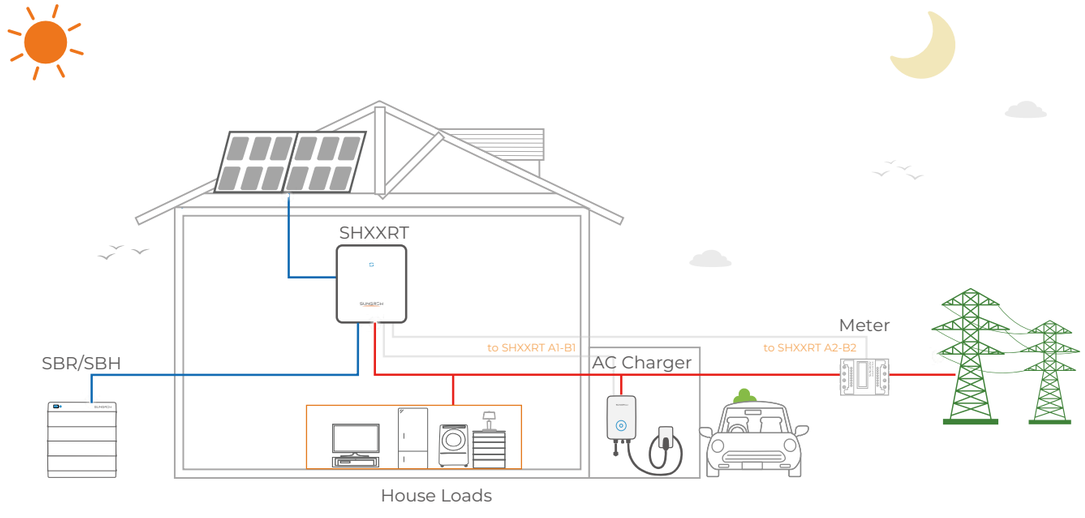
iHomeManager

Monitoring

iSolarCloud

Zero-carbon Life Home Charging

SUNGROW Charging combines Sungrow Photovoltaic (PV) system and Energy Storage System (ESS) with an intelligent Operation and Maintenance (O&M) management platform to provide an integrated Beyond Charging intelligent solution for charging stations. While meeting the need for efficient, stable, and safe charging, it also provides the opportunity for revenue generation from photovoltaic power generation and charging. As a result, allowing electric vehicles to use renewable energy reduces the use of conventional energy and helps achieve the carbon neutrality goal.

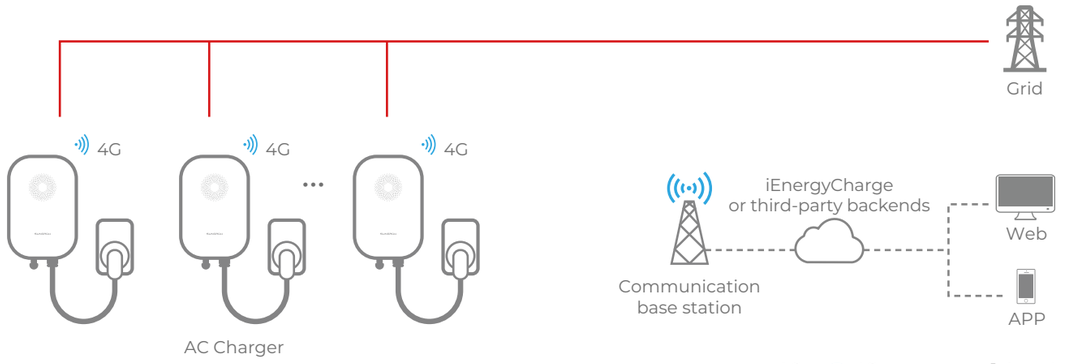


Benefits of Sungrow's Beyond Charging Solution

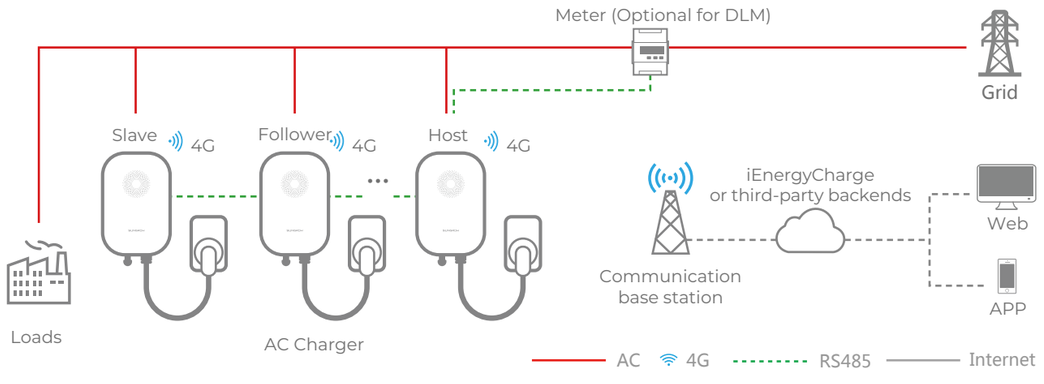
- Deliver one-stop design, commissioning, O&M.
- Address the issue of insufficient power distribution capacity in charging stations.
- Alleviate the load on the power supply during peak periods.
- Implement an Energy Storage System (ESS) to enable off-grid (during utility grid outage), improving the reliability of charging and reduce charging costs via increasing green electricity usage, peak shaving, and valley filling.
- Integrated Energy Management System (EMS) allocates energy to each unit within the system, maximizing energy utilization efficiency.
- Achieve a closed loop of green energy to enhance the utilization of clean energy and decrease carbon emissions and reduce the electricity cost.

Semi-public & Public Destination Charging: AC 22kW/DC 30kW Charger Solutions

AC 22kW Charger Solution

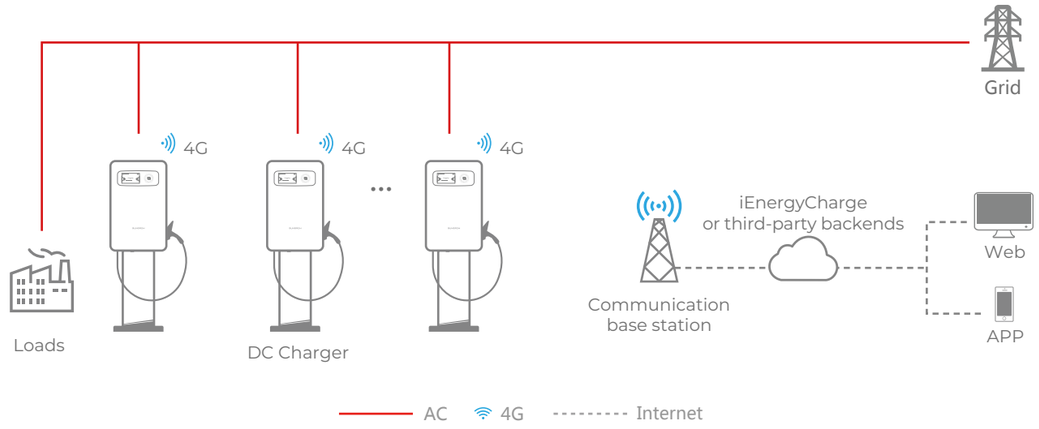


AC 22kW Charger DLB/DLM Solution

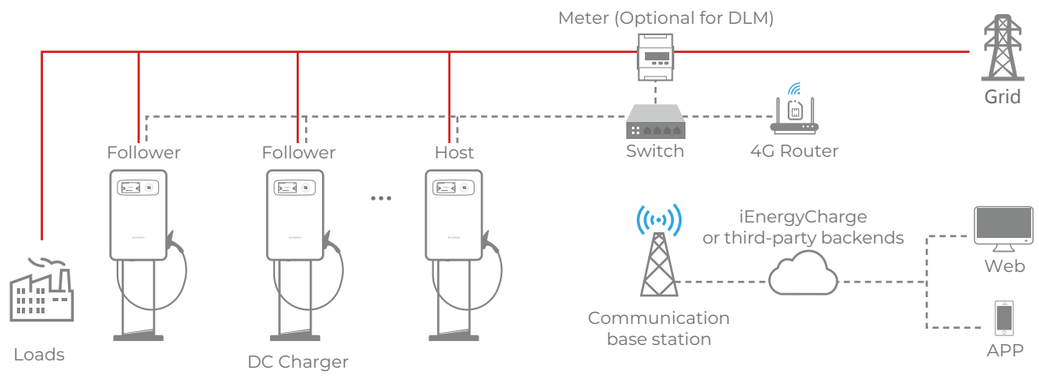


* When the loads and chargers are connected to the same point of connection, DLM function is needed for dynamic load management.
When only chargers are connected to the point of connection, the DI-B function is required for dynamic load balance.

DC 30kW Charger Solution

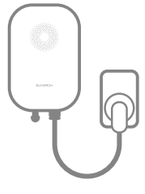


DC 30kW Charger DLB/DLM Solution

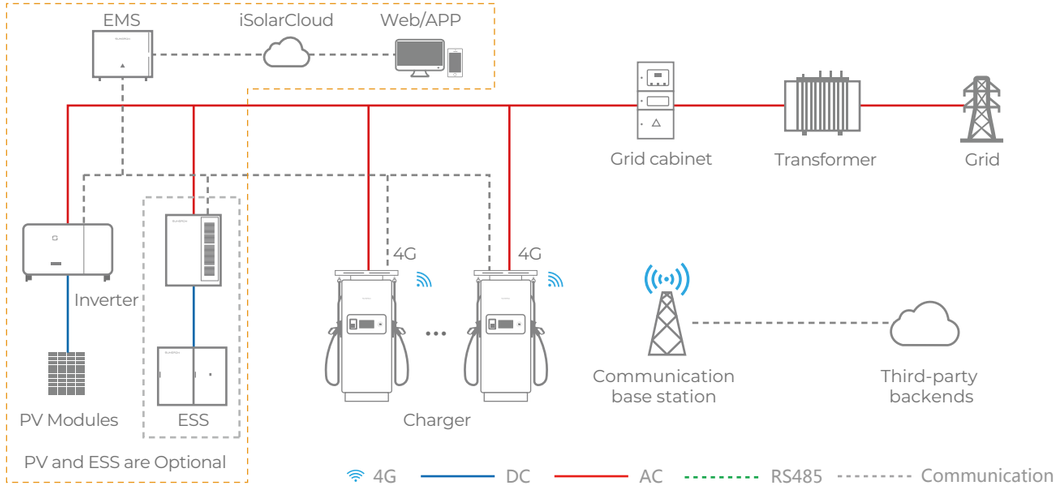


* When the loads and chargers are connected to the same point of connection, DI-M function is needed for dynamic load management.
When only chargers are connected to the point of connection, the DI-B function is required for dynamic load balance.

Recommended Products

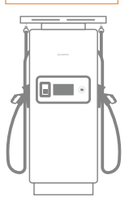
AC Charger	AC Charger	DC Charger	Meter(Optional for DLM)	Monitoring
				
AC22E-01	AC22E-G2	IDC30E	RS485 Ethernet Three-phase meter	iEnergyCharge

Public Fast Charging: 180kW DC Charger Solution

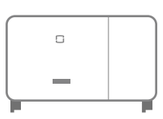


Recommended Products

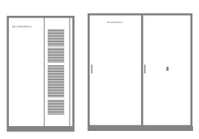
DC Charger



IDC180E
(120kW-180kW output)



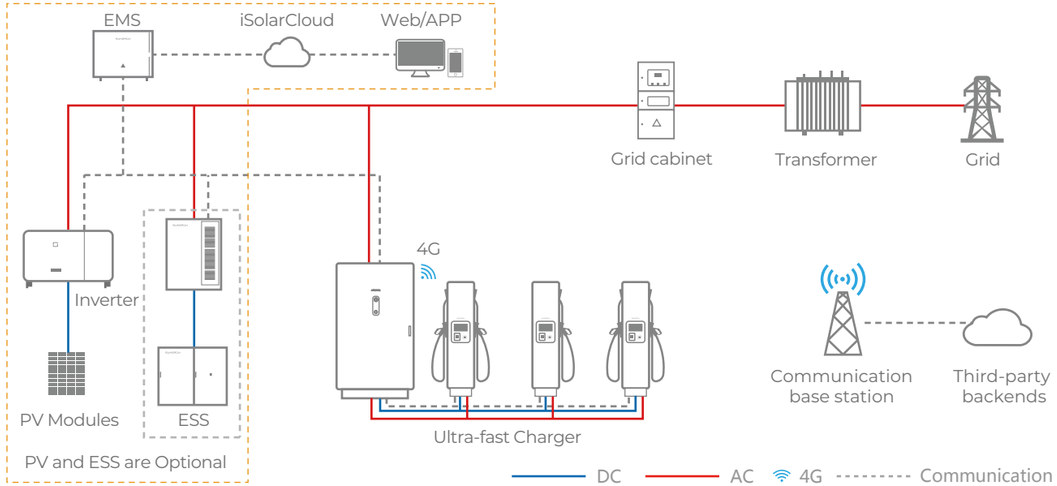
Inverter



ESS

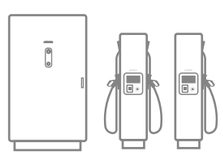
EMS

Public Ultra-fast Charging: 480kW DC Charging Solution

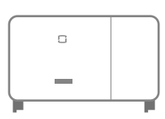


Recommended Products

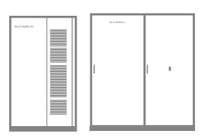
Ultra-fast Charger



IDC480E



Inverter



ESS

EMS

Benefits of Beyond Charging Solution for Public Scenarios

Challenges for Fast Charging Stations

- Fast charging stations pose significant challenges to the utility grid due to their high charging power. This results in utility grid pollution.
- It is difficult to enlarge distribution capacity to meet the growing electricity demand of charging station.
- Fast charging stations require large amounts of power, leading to high charging costs. The huge energy consumption leads to the financial burden during operating these stations.
- During periods of peak power consumption, high power EV chargers are unable to operate at full capacity. This reduces the availability of charging station and causes charging delay for users.

Benefits of Sungrow's Beyond Charging Solution

- Delivering one-stop design, commissioning, O&M.
- EMS+AI algorithm for intelligent control strategy and complete system solutions.
- Competitive advantage in reducing energy cost via increasing green electricity usage, peak shaving, and valley filling.
- Reducing the impact on utility grid, alleviating the restriction of distribution capacity and avoiding expensive extension of grid connection.
- Ability to operate off-grid (during utility grid outage), improving the reliability of the charging.
- Increasing availability of charging stations.
- Enable electric vehicles to reduce carbon emissions via utilization of green electricity.

AC007UK-01
AC007UK-01 L1

7kW AC charger for electric vehicles

RELIABLE AND SAFE

- Integrated with 6mA DC fault current detection
- IP65 protection suitbale for both indoor and outdoor usage
- Integrated with PEN fault protection

SMART MANAGEMENT

- Beyond charging – maximum usage of solar energy together with Sungrow hybrid inverter **
- Control and visualization available on App
- Adaptive load management to prevent overload ***

FLEXIBLE APPLICATION

- Different charging modes to fit all needs *
- Compatible with electric vehicles by AC type2 plug
- Capable of OCPP 1.6J communication

USER FRIENDLY

- Support various options for authentication
- Time-saving installation by wall-mounting or with stand column ****

Technical parameters	AC007UK-01 L1	AC007UK-01
AC Input		
Nominal grid voltage	230 Vac (± 10 %)	
Nominal grid frequency	50 Hz / 60 Hz	
AC Output		
Max. charging power	7.4 kW	
Max. charging current	32 A	
Protection & Function		
Integrated DC fault current detection	Yes, 6 mA	
Overload protecion	Yes	
Over-temperature protection	Yes	
Surge protection	AC Type II	
PEN protection	Yes	
Mechanical impact protection	IK08	
ALM (Adaptative load management)	Yes	
User interface & Communication		
Display	LED indicator and App	
Authentication	RFID-card / iEnergyCharge App	RFID-card / iSolarCloud App
Charging mode	--	Eco charging / Fast Charging / Scheduled Charging / Customized charging
Communication interface	WLAN, RS485 (to external meter)	WLAN, RS485 (to Sungrow inverter)
Communication protocol	OCPP 1.6 J	
Gerneral data		
Dimensions (W * H * D)	205 mm * 310 mm * 92 mm	
Weight	4.2 kg	
Installation method	Wall-mounting (default) Stand column (optional)	
Degree of protection	IP65	
Operating ambient temperature range	-30 °C - 50 °C	
Allowable relative humidity range	5 % - 95 % (non-condensing)	
Cooling method	Natural convection	
Max. operating altitude	≤ 2000 m	
AC cable specification	Cross-section 6 mm² * 3	
Charging connector	AC Type 2	
Charging cable length	7 m	
Standby self-consumption	< 5 W	
Warranty	3 years (standard)	5 years (standard)
Compliance	UKCA, No.1467, EN / IEC 61851-1, EN / IEC 61851-21-2	

* Setting of different charging modes is available on iSolarCloud.
** AC charger AC007UK-01 is compatible with Sungrow 1-phase hybrid inverter SHRS.
*** Additional smart meter is required and can be ordered separately. Please consult Sungrow for more information.
**** Stand column can be ordered separately. Please consult Sungrow for more information.

AC007 / 011E-01

7kW / 11kW AC charger for electric vehicles

RELIABLE AND SAFE

- Integrated with 6mA DC fault current detection
- IP65 protection suitable for both indoor and outdoor usage

SMART MANAGEMENT

- Beyond charging – maximum usage of solar energy together with Sungrow hybrid inverter **
- Control and visualization available on App

FLEXIBLE APPLICATION

- Different charging modes to fit all needs *
- Compatible with electric vehicles by AC Type2 plug

USER FRIENDLY

- Support various options for authentication
- Time-saving installation by wall-mounting or with stand column ***

Technical parameters	AC007E-01	AC011E-01
AC input		
Grid voltage	1 / N / PE, 230 Vac (± 20 %)	3 / N / PE, 400 Vac (± 20 %)
Nominal grid frequency	50 Hz / 60 Hz	
Earthing system	TT, TN	
Max. input current	32 A (1-phase)	16 A (3-phase)
Standby self-consumption	< 5 W	
AC output		
Max. charging power	7.4 kw	11 kW
Max. charging voltage	230 Vac	
Max. charging current	32 A (1-phase)	16 A (3-phase)
Protection & Function		
Integrated DC fault current detection	Yes, 6mA	
Overload protection	Yes	
Over-temperature protection	Yes	
Surge protection	Yes	
Ground fault monitoring	Yes	
ALM (adaptive load management)	Yes	
Automatic phase switching	/	Yes
User interface		
Display	LED indicator / App	
Authentication	RFID-card / iSolarCloud App	
Firmware update	OTA	
RFID system	Mifare ISO 14443 A	
Charging mode	Eco charging / Fast charging / Scheduled charging / Customized charging	
Communication interface	WLAN, RS485 (to Sungrow inverter)	
Mechanical data		
Dimensions (W*H*D)	205 mm * 310 mm * 92 mm	
Weight	4.2 kg	3.8 kg
Installation method	Wall-mounting (default) Stand column (optional)	
AC cable specification	Cross-section 3 * 6 mm²	Cross-section 5 * 2.5 mm²
Charging cable length	7 m	
Charging connector	Type 2	
Environmental data		
Enclosure rating	IP65	
Mechanical impact protection	IK08	
Operating ambient temperature range	-30 °C - 50 °C	
Allowable relative humidity range	5 % - 95 % (non-condensing)	
Max. operating altitude	2000 m	
General data		
Compliance	EN 300 328, EN 300 330, EN 301 489-1 / 3 / 17, EN IEC 61000-6-1 / 3, EN IEC 61851-1 / 21, EN IEC 62311	
Warranty	5 years (standard)	

* Setting of different charging modes is available on iSolarCloud.
** AC charger AC007E-01 is compatible with Sungrow 1-phase hybrid inverter SHRS and AC011E-01 compatible with 3-phase hybrid inverter SHRT / SHRT-20.
*** Stand column can be ordered separately. Please consult Sungrow for more information.

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AC22E-01

22kW AC charger for electric vehicles

Preliminary

RELIABLE AND SAFE

- Integrated with 6mA DC fault current detection
- IP65 protection suitable for both indoor and outdoor usage

SMART MANAGEMENT

- Beyond charging – maximum usage of solar energy together with Sungrow hybrid inverter *
- Capable of load management and balancing to prevent overload **
- Control and visualization via App

FLEXIBLE APPLICATION

- Available in two power outputs 3-phase 11kW and 22kW
- Capable of OCPP 1.6J communication
- Different charging modes to fit all needs ***

USER FRIENDLY

- Integrated with MID-certified meter to accurately measure electricity usage
- Support various options for authentication
- Time-saving installation by wall-mounting or with stand column options

Technical parameters	AC22E-01
AC input	
Grid voltage	3 / N / PE, 230 V / 400 V
Nominal grid frequency	50 Hz / 60 Hz
Earthing system	TT / TN
Max. input current	32 A
Standby self-consumption	< 6.5 W
AC output	
Max. charging power	22 kW / 11 kW (configurable)
Max. charging voltage	230 V / 400 V
Max. charging current	32 A / 16 A (configurable)
Protection & Function	
Integrated DC fault current detection	Yes, 6 mA
Overload protection	Yes
Over-temperature protection	Yes
Surge protection	Yes
Ground fault monitoring	Yes
ALM (Adaptive load management)	Yes
Automatic phase switching	Yes
User interface	
Display	LED indicator and App
Authentication	Plug & play / RFID-card / iSolarCloud App / iEnergy Charge App
Firmware update	OTA
RFID system	Mifare ISO 14443 A
Energy metering	MID-certified meter (optional)
Metering accuracy	Class B
Charging mode	OCPP / Plug & play / EMS by iEnergyCharge Eco charging / Fast charging / Scheduled charging / Customized charging by iSolarCloud
Communication interface	RS485 (to inverter / meter) WLAN / Ethernet / 4G (to cloud)
Communication protocol (charger-to-CSMS)	OCPP 1.6 J
Mechanical data	
Dimensions (W*H*D)	214 mm * 346 mm * 125 mm
Weight	< 6.65 kg
Installation method	Wall-mounting (default) Stand column (optional)
AC cable specification	Cross-section 5 * 6 mm²
Charging cable length	7 m
Charging connector	Type 2
Environmental data	
Enclosure rating	IP65
Mechanical impact protection	IK10
Operating ambient temperature range	-30 °C - 50 °C
Allowable relative humidity range	5 % - 95 % (non-condensing)
Max. operating altitude	3000 m
Cooling method	Natural convection
General data	
Compliance	EN 300 328, EN 300 330, EN 301 489-1 / 3 / 17 / 52, EN 301 908-1 / 13, EN 50663, EN 50665, EN IEC 61851-1, EN IEC 61851-21-2, EN IEC 62311, EN 62479
Warranty	3 years (standard)

* Additional smart meter required.
** Compatible with Sungrow hybrid inverter SHRT / SHRT-20.
*** Only available with Sungrow hybrid inverter in iSolarCloud.

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AC22E-G2

22kW AC charger for electric vehicles

Preliminary

RELIABLE AND SAFE

- Integrated with 30mA AC fault current detection
- Certified with EMC Class B protection for safe use in public and residential scenarios
- IP55 protection suitable for both indoor and outdoor usage

SMART MANAGEMENT

- Capable for load management and balancing to prevent overload
- Control and visualization via App

FLEXIBLE APPLICATION

- Compatible with 3-phase and 1-phase AC connection
- Capable of OCPP 1.6J communication
- Support various options for network connection

USER FRIENDLY

- Integrated with MID-certified meter to accurately measure electricity usage
- Support various options for authentication
- Time-saving installation by wall-mounting or with stand column options

Technical parameters	AC22E-G2
AC Input	
Grid voltage	3 / N / PE, 230 V / 400 V (± 20 %)
Nominal grid frequency	50 Hz / 60 Hz
Earthing system	TT / TN
Max. input current	32 A
Standby self-consumption	< 6.5 W
AC Output	
Max. charging power	22 kW or 11kW @ 3-phase connection (configurable) 7.4 kW @ 1-phase connection
Max. charging voltage	230 V / 400 V
Max. charging current	32 A @ 22 kW and 7.4 kW outputs 16 A @ 11 kW output
Protection & Function	
Integrated DC fault current detection	Yes, 6 mA
Integarted AC fault current detection	Yes, 30 mA
Overload protecion	Yes
Over-temperature protection	Yes
Surge protection	Yes
Ground fault monitoring	Yes
ALM (Adaptative load management)	Yes *
User interface	
Display	LED indicator and App
Authentication	Plug & play / RFID-card / iEnergyCharge App
Firmware update	Over-the-air (OTA)
RFID system	Mifare ISO 14443 A
Energy metering	MID-certified meter integrated
Metering accuracy	Class B
Communication interface	RS485 / WLAN / Ethernet / 4G
Communication protocol (charger-to-CSMS)	OCPP 1.6 J Ready for OCPP 2.0.1
Mechanical data	
Dimensions (W*H*D)	214 mm * 346 mm * 125 mm
Weight	< 5 kg
Installation method	Wall-mounting (standard) Stand column (optional)
AC cable specification	Cross-section 5 * 6 mm²
Charging connector	Type-2 socket outlet without shutter (standard) ** Type-2 socket outlet with shutter (optional)
Environmental data	
Enclosure rating	IP55
Mechanical impact protection	IK10
Operating ambient temperature range	-30 °C - 50 °C
Allowable relative humidity range	5 % - 95 % (non-condensing)
Max. operating altitude	3000 m
Cooling method	Natural convection
EMC	Class B
General data	
Compliance	EN 300 328, EN 300 330, EN 301 489-1 / 3 / 17 / 52, EN 301 908-1 / 13, EN 50663, EN 50665, EN IEC 61851-1, EN IEC 61851-21-2, EN IEC 62311, EN 62479

* Additonal meter is required to install externally to enable adaptive load management
** Charging cable of Model 3 type with length of 7.5 m can be purchased separately. Please consult Sungrow for more information.

IDC30E

30kW Fast DC charger for electric vehicles

RELIABLE

- IP65 protection and C5 anti-corrosion
- Product design lifecycle over 10 years
- Innovative design without additional filter mat to enjoy maintenance free

EFFICIENT

- Max. efficiency up to 96.5 %
- Dynamic load management to optimize EV charging
- Independent air duct design to achieve efficient cooling

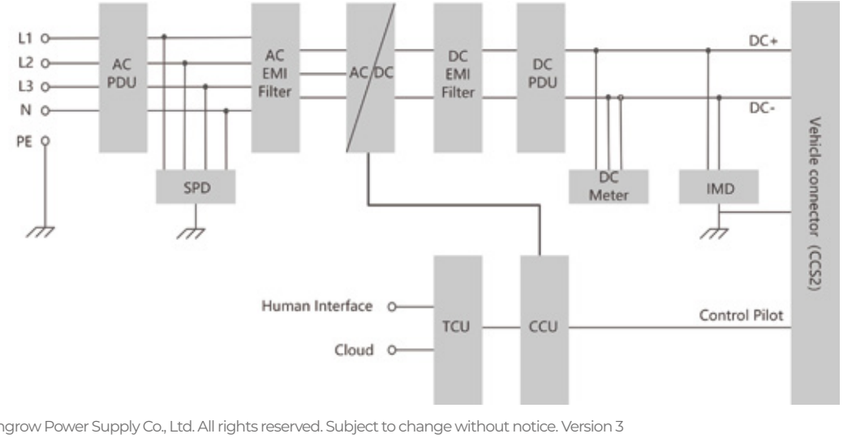
FLEXIBLE APPLICATION

- Adaptive voltage range 200 - 1000 Vdc, compatible with new electric vehicles
- Compatibility with PV-ESS system reserved

USER FRIENDLY

- Support various options for authentication and payment *
- Suitable for C&I and residential usage with EMC Class B
- Environmental friendly with extremely low noise < 50 dB(A)

CIRCUIT DIAGRAM



Technical parameters	IDC30E
Charging connector	
Connector type	CCS2
EVSE-vehicle protocol	DIN SPEC 70121, ISO 15118
Number of EV served	1
Cable length	5 m
DC Output	
DC output power	30 kW
DC output voltage	200 Vdc - 1000 Vdc
DC output current	80 A
AC Input	
Grid voltage	3 / N / PE, 400 Vac (± 10 %)
Nominal grid frequency	50 Hz
Grid frequency range	45 Hz - 55 Hz
Earthing system	TN-C, TN-S, TN-C-S, TT
Nominal input current	46 A
Max. input current	52 A
Power factor	⩾ 0.99
Total harmonic distortion (THDi)	< 5 % at full output power
Overvoltage category	III
Efficiency	
Max. efficiency	96.5 %
Protection	
Over / under voltage protection	Yes
Over-current protection	Yes
Short-circuit protection	Yes
Over-temperature protection	Yes
Surge protection	Yes
User interface	
Display	7-inch color touch screen
Language	English (default) Other languages available by firmware upgrade
Authentication	RFID-card, Plug & Play, Auto-charge (default) Plug & Charge, Payment terminal (optional)
Firmware update	Over-the-air (OTA) by iEnergyCharge
RFID system	ISO / IEC 14443 A / B, ISO / IEC 15693
Energy metering	MID metering (CE compliant) Eichrecht / PTB compliant (optional)
Communication interface	4G, Ethernet, WLAN
Communication protocol (charger-to-CSMS)	OCPP 1.6 J Ready for OCPP 2.0.1
Emergency stop	Yes, integrated
Mechanical data	
Dimensions (W*H*D)	500 mm * 800 mm * 288 mm
Weight	53 kg
Installation method	Wall-mounting (default) Stand column, trolley (optional)
Mechanical impact protection	IK10 **
Environmental data	
Degree of protection	IP65
Anti-corrosion degree	C5
Operating ambient temperature range	-35 °C - 55 °C
Allowable relative humidity range	5 % - 95 % (non-condensing)
Max. operating altitude	≤ 2000 m
Cooling method	Smart forced air cooling
Noise (typical)	≤ 50 dB (A)
EMC	Class B
General data	
Compliance	EN IEC 62311, EN IEC 61851-1 / 21, EN IEC 61000-6-1 / 2 / 3 / 4, EN 61851-23 / 24, EN 301 908-1 / 2 / 13, EN 301 511, EN 301 489 -1 / 3 / 17 / 52, ESTI / EN 300 330, ESTI / EN 300 328, IEC 61851-1 / 23 / 24, DIN SPEC 70121, DIN SPEC 70122
Warranty	3 years (standard)

* Payment terminal is an optional feature. Please consult Sungrow for more information.
** The mechanical impact protection degree of HMI is IK08.

IDC180E

120kW-180kW Fast DC charger for electric vehicles

NEW

RELIABLE AND SAFE

- IP65 protection and C5 anti-corrosion
- Product design lifecycle over 10 years
- Innovative design with no additional filter mat for maintenance free operation

EFFICIENT AND SMART

- Max. efficiency up to 96.5%
- Dynamic load management to optimize EV charging
- Independent air duct design to achieve efficient cooling

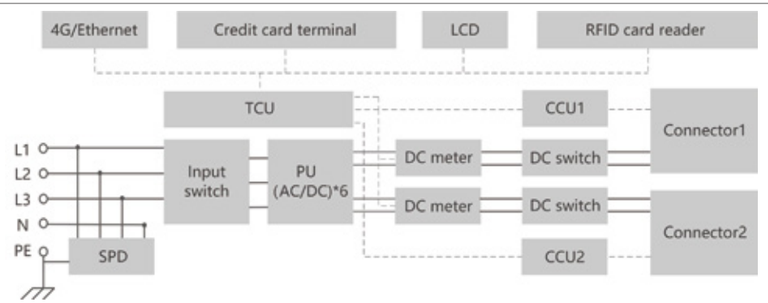
USER FRIENDLY

- Supports multiple authentication and payment options *
- 10-inch touch screen displays more information to start charging effortlessly
- Charging cable management system for premium user experience

FLEXIBLE APPLICATION

- Adaptive voltage range 200-920Vdc, compatible with new electric vehicles
- Plug & charge, easy to commission and use
- Compatibility with PV-ESS system reserved

CIRCUIT DIAGRAM



Technical Data	IDC180E
Charging connector	
Connector type	Outlet #1: CCS2 Outlet #2: CCS2
Number of EV served	2
Cable length	5 m 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
DC output voltage	200 Vdc - 920 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
Power factor	≥ 0.99
Total harmonic distortion (THDi)	< 5 % at full output power
Overvoltage category	III
Standby self-consumption	≤ 48W
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 1.6 J Ready for OCPP 2.0.1
Mechanical data	
Dimensions (W*H*D)	930 mm * 1930 mm * 615 mm
Weight	≤ 500 kg
Installation method	Floor mounted
AC cable specification	Min. 150 mm^2 Max. 240 mm^2
Environmental data	
Enclosure rating	IP65
Anti-corrosion degree	C5
Mechanical impact protection	IK10 **
Operating ambient temperature range	-35 °C - 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
General data	
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)

* Authentication via debit or credit card is optional and requires payment terminal integrated in IDC180E. Please consult Sungrow for more information.

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

IDC480E

480kW Ultra-fast charging system for electric vehicles

Preliminary

RELIABLE AND SAFE

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

EFFICIENT AND SMART

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

USER FRIENDLY

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

FLEXIBLE APPLICATION

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

Model	IDC480E - Power Cabinet
AC input	
Grid voltage	3 / N / PE, 400 Vac (± 10 %)
Nominal grid frequency	50 Hz / 60 Hz
Rated input current	770 A
Power factor	≥ 0.99
Standby power	≤ 100 W
Earthing system	TN-C, TN-S, TN-C-S, TT
THDi (Total harmonic distortion)	< 5 % at full output power
DC output	
Max output power	480 kW
Output voltage range	200 Vdc to 1000 Vdc
Number of output	Max. 8
Max. Efficiency	96.5 %
General data	
Dimensions (W*H*D)	900 mm * 2200 mm * 1380 mm
Weight	1200 kg
Operating temperature	-35 °C - 55 °C
Operating humidity range	5 % - 95 % (non-condensing)
Operating altitude	≤ 2000 m
Noise (typical)	≤ 65 dB (A) at 1m distance / 25 °C, at full output power
Mechanical impact protection	IK10 (enclosure)
Enclosure rating	IP65
Anti-corrosion degree	C5
Communication	
Communication interface	4G / Ethernet
Communication protocol (charger-to-CSMS)	OCPP 1.6 J Ready for OCPP 2.0.1
User interface	
Emergency stop	Yes
Display	LED indicator
Protection	
Over/Under voltage protection	Yes
Overload protection	Yes
Over temperature protection	Yes
Leakage protection	Yes
Surge protection	Yes
Short circuit protection	Yes
Overvoltage category	III
Norm and certification	
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	2 years (standard)

Model	IDC480E - User Terminal
DC output	
Connector type	CCS2
User terminal cable configuration	Air cooled user terminal: dual cable / single cable (optional) Liquid cooled user terminal: single cable
Communication to EV	DIN70121, ISO15118
Max.output power	Air cooled connector: 240 kW Liquid cooled connector: 480 kW
Output voltage range	200 Vdc - 1000 Vdc
Max.output current	Air cooled cable: 250 A / 400 A (boost to 500 A) Liquid cooled cable: 500 A
Energy metering	MID-certified meter integrated Eichrecht / PTB-certified meter integrated (optional)
General data	
Dimensions (W*H*D)	Air cooled user terminal: 430 mm * 1800 mm * 450 mm Liquid cooled user terminal: 520mm * 1800 mm * 450 mm
Weight	130 kg
Cable length	Air cooled cable: 5 m / 7 m (optional) Liquid cooled cable: 5 m
Operating temperature range	Air cooled user terminal: -35 °C - 55 °C Liquid cooled user terminal: -30 °C - 50 °C
Operating altitude	≤ 2000 m
Operating noise level	≤ 60 dB (A) at 1m distance / 25 °C, at full output power
Mechanical impact protection	IK10 (enclosure)
Enclosure rating	IP65
Anti-corrosion degree	C5
User interface	
User authentication	RFID-card / Plug & play / Auto-charge (standard) Plug & charge / Debit or credit-card (optional)
Display	10-inch color touch screen
RFID card system	ISO/IEC 14443A/B / ISO/IEC 15693 / NFC
Emergency button	Yes
LED Display	Yes
Cable management system	Yes
Configuration	
Software update	Over-the-air update
Multilanguage system	English (standard) Other languages available by firmware upgrade
Protection	
Over/Under voltage protection	Yes
Overload protection	Yes
Over temperature protection	Yes
Leakage protection	Yes
Surge protection	Yes
Short circuit protection	Yes
Overvoltage category	III
Norm and certification	
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	2 years (standard)

SH15/20/25T

Hybrid Three Phase Inverter

FULL BACKUP

- Built-in 63 A bypass for whole home backup
- 10 ms seamless switch
- Peak output up to 36500 VA (10 s) in backup mode (SH25T)

FLEXIBLE APPLICATION

- Support 100 % unbalance output in backup and on grid mode
- Max. 16 A DC input current per string
- 50 A fast charge / discharge current

FRIENDLY INSTALLATION

- Plug & Play installation
- Quiet operation for indoor or outdoor installation

SAFE AND DURABLE

- Support precise AFCI
- IP65/C5

Type designation	SH15T	SH20T	SH25T
Input (DC)			
Recommended max. PV input power	30000 Wp	40000 Wp	50000 Wp
Max. PV input voltage *		1000 V	
Min. PV input voltage / Startup input voltage		150 V / 180 V	
Rated PV input voltage		600 V	
MPPT operating voltage range **		150 V - 950 V	
No. of independent MPP trackers		3	
No. of PV strings per MPPT		2 / 2 / 1	
Max. PV input current		80 A (32 A / 32 A / 16 A)	
Max. DC short-circuit current		100 A (40 A / 40 A / 20 A)	
Max. current for input connector		30 A	
Battery data			
Battery type		Li-ion battery	
Battery voltage range		100 V - 700 V	
Max. charge / discharge current ***		50 A / 50 A	
Max. charge / discharge power	30000 W / 15000 W	30000 W / 20000 W	30000 W / 25000 W
Input and Output (AC)			
Max. AC power from grid ****		43000 VA	
Rated AC output power	15000 W	20000 W	25000 W
Max. AC output apparent power	15000 VA	20000 VA	25000 VA
Max. AC output current	22.8 A	30.4 A	37.9 A
Rated AC voltage		3 / N / PE, 220 V / 380 V ; 230 V / 400 V; 240 V / 415 V	
AC voltage range		270 V - 480 V	
Rated grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 Hz - 55 Hz / 55 Hz - 65 Hz	
Harmonic (THD)		< 3 % (of rated power)	
Power factor at rated power / Adjustable power factor		> 0.99 / 0.8 leading to 0.8 lagging	
Feed-in phases / connection phases		3 / 3-N-PE	
Backup data(on grid mode)			
Max. output power for backup load ****		43000 W	
Max. output current for backup load		3 * 63 A	
Backup data(off-grid mode)			
Rated voltage		3 / N / PE, 220 / 380 V; 230 / 400 V; 240 / 415 V (± 2 %)	
Rated frequency		50 Hz / 60 Hz (± 0.2 %)	
THDV (@Linear load)		2 %	
Backup switch time		< 10 ms	
Rated output power	15000 W / 15000 VA	20000 W / 20000 VA	25000 W / 25000 VA
Peak output power *****	25500 W / 25500 VA ,10 s	32000 W / 32000 VA ,10 s	36500 W / 36500 VA ,10 s
Efficiency			
Max. efficiency / European efficiency	98.1 % / 97.6 %		98.2 % / 97.8 %
Protection & Function			
Grid monitoring		Yes	
DC reverse polarity protection		Yes	
AC short-circuit protection		Yes	
Leakage current protection		Yes	
DC switch (solar)		Yes	
Surge protection		DC Type II / AC Type II	
PID zero		Yes	
Battery input reverse polarity protection		Yes	
General data			
Topology (solar / battery)		Transformerless / Transformerless	
Degree of protection		IP65	
Dimensions (W * H * D)		620 mm * 480 mm * 245 mm	
Weight	38 kg		40 kg
Mounting method		Wall-mounting bracket	
Operating ambient temperature range		-25 °C - 60°C	
Allowable relative humidity range(Non-condensing)		0 % - 100 %	
Cooling method	Natural convection		Fan cooling
Max. operating altitude		2000 m	
Noise(Typical)	35 dB (A)		50 dB (A)
Display		LED	
Communication		RS485, WLAN, Ethernet, CAN	
DI / DO		DI * 4 / DO * 2 / DRM0	
DC connection type		MC4 compatible connector (PV,Max.6 mm²) /Plug and play connector (battery, Max.10 mm²)	
AC connection type		Plug and play connector (Max.16 mm²)	
Compliance		IEC / EN 62109, IEC 61000-6, EN 62477-1, IEC 61727, IEC 62116, IEC 62920, EN 55011, CISPR 11, VDE-AR-N-4105, EN 50549-1, NRS 097, AS/NZS 4777.2:2020, TOR Type A, R25, CEI 0-21	

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection
** Please refer to the user manual for the full load MPPT voltage range
*** Depending on the connected battery
**** Please refer to the user manual and modify the settings based on actual load power
***** Can be reached only if PV and battery power is sufficient

SBH100/150/200/ 250/300/350/400

High Voltage LFP Battery

HIGH POWER

- Up to 50A continuous charging and discharging current, 8 modules unit power up to 28 kW
- Up to 100 % usable energy

SAFETY

- Lithium iron phosphate Battery
- Multi-stages protection design and extensive safety certification

FLEXIBILITY

- Extendable during lifetime
- 10–40 kWh capacity range

EASY INSTALLATION

- Plug and play, no cable needed between battery modules

Type designation	SBH100	SBH150	SBH200	SBH250	SBH300	SBH350	SBH400
Technical properties	 2 modules	 3 modules	 4 modules	 5 modules	 6 modules	 7 modules	 8 modules
System data							
Battery type	LiFePO4 Prismatic Cell						
Battery module	5.0 kWh , 45 kg						
Energy (useable) *	10.0 kWh	15.0 kWh	20.0 kWh	25.0 kWh	30.0 kWh	35.0 kWh	40.0 kWh
Nominal voltage	140.8 V	211.2 V	281.6 V	352.0 V	422.4 V	492.8 V	563.2 V
Rated DC power	7.04 kW	10.56 kW	14.08 kW	17.60 kW	21.12 kW	24.64 kW	28.16 kW
Operating voltage	118.8V-160.6V	178.2V-240.9V	237.6V-321.2V	297V-401.5V	356.4V-481.8V	415.8V-562.1V	475.2V-642.4V
Max. charging/discharging current: continuous	50 A						
Depth of discharge	Max. 100 % DOD (settable)						
Short circuit current	3500 A						
Display	SOC indicator , Status indicator						
Communication interface	CAN						
Protection							
Over/under voltage protection	Yes						
Over current protection	Yes						
Over/under temperature protection	Yes						
DC breaker	Yes						
General data							
Dimensions (W*H*D)	675 * 580 * 350 mm	675 * 740 * 350 mm	675 * 900 * 350 mm	675 * 1060 * 350 mm	675 * 1220 * 350 mm	675 * 1380 * 350 mm	675 * 1540 * 350 mm
Weight	106 kg	151 kg	196 kg	241 kg	286 kg	331 kg	376 kg
Installation location	Indoor / Outdoor						
Mounting method	Floor stand						
Operating ambient temperature range	Charge：0°C - 50°C Discharge：-20°C - 50°C						
Degree of protection	IP55						
Allowable relative humidity range	0 % - 95 % no condensing						
Max. operating altitude	Max. 2000 m						
Cooling method	Natural convection						
Certificates	CE, CEC, IEC 62619, IEC 62040, UN 38.3, VDE 2510-50, IEC 62477, IEC 63056						
Warranty**	10 Years						

* Test conditions: 25 ℃ , 100 % depth of discharge (DOD), 0.2C charge&discharge
** Refer to battery warranty letter for conditional application

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Sungrow Charging Management System

The iEnergyCharge Management Platform is a charger management software system by integrating IoT, big data, and AI technologies. It is designed to efficiently empower the entire lifecycle operation and maintenance of charger, based on comprehensive monitoring services and excellent user experience.

- **User Management**
  Supports multi-level user management, role permissions assigned in the backend, meeting various demands of different users.
- **Station Management**
  Allows batch devices accessing, flexibly management for single cluster stations, covering full-scenario station monitoring.
- **Multi-dimension Monitoring**
  Collect full-cycle data, continuously monitor chargers operations, supporting multi-dimensional data statistics.
- **Intelligent Alerts**
  Analysis massive data, active alarm for abnormal data, self-training AI models and detect fault early.
- **Efficient Operation & Maintenance**
  Presents rich charts overview, global search with a single click, simplified management and efficient operation.

iEnergyCharge App

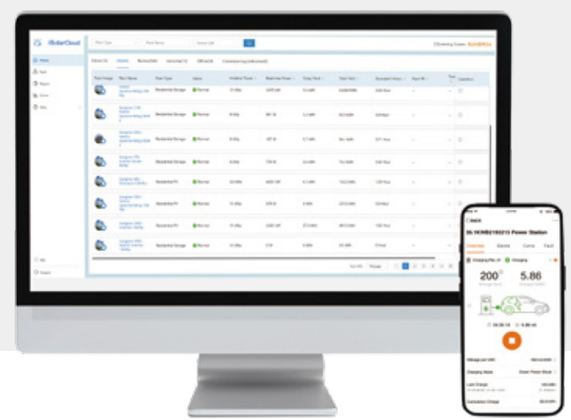
The iEnergyCharge App is a charger management mobile terminal application, especially designed for terminal customers, based on intelligent operational control and portable user experience, and realise highly efficiency services for full-scenario charging.

- **Quick Access**
  Charging station building conveniently, intelligent QR scanning, and one-click access.
- **Device Sharing**
  Flexible management, multi-user access, and energy usage statistics.
- **Smart Charging**
  Appointment charging, power adjustment, and message notifications.
- **Efficient Operation & Maintenance**
  Near-end monitoring, parameter setting, and firmware upgrading.

Type designation	iEnergyCharge
Client enviroment	
Lowest browser version	Chrome 65(recommended),Safari 11, Firefox 60
Lowest system version	Android 5.0，iOS 13.0
Languages	Chinese,English,German,French,Spanish,Italian,Dutch,Norwegian
Browser resolution	1920 * 1080 (recommended)，1366 * 768
System Parameters	
System reliability	99.99%
Protocol	OCPP1.6、OCPP2.0

iSolarCloud

Remote Monitoring and O&M Platform



FLEXIBLE AND FRIENDLY

- Centralized power plant management, optimized OPEX
- Simple network infrastructure, fastplatform deployment
- Flexible data access,Web portaland App

SIMPLE AND EFFICIENT

- Full plant supervision via muti-dimensional analysis, automated reports
- Accurate positioning of faults, quick trouble shooting, realtime push of information, reducing time to resolve faults
- Parameter setting,firmware updates, smart IV curve diagnosis
- Support of plant maintenance by remote Web access of local data logger / SCADA

SAFE AND RELIABLE

- Hierarchicalaccess management
- Cyber security and redundant data storage overthe lifecycle of plants, certified data security
- Full log for trace and audit

Type designation	iSolarCloud
Monitoring Device	
Device type	Inverter, combiner box, meteo station, energy meter, transformer and other plant devices
Monitoring Capacity	More than 100 GW (scalable)
Data Collection	
Time interval	5 minutes
General Data	
Language	Chinese, English, German, French, Spaish, Portuguese, Italian, Dutch, Polish, Japanese, Korean, Vietnamese, Traditional Chinese
Data storage time	> 25 years
Storage capability	> 100PB
System reliability	99.99%
Minimum Web requirements	
Browser	IE 11, Chrome 65, Safari 11, Firefox 60
Resolution	1366 * 768, 1920 * 1080 recommended
Minimum Operating Environment for App	
Dimensions (W * H)	1920 * 1080, 2001 * 1125, 1280 * 720
Mounting type	Android 5.0, iOS 10.0

Eichrecht Certification

Eichrecht Module D

Baumusterprüfbescheinigung

Nummer **T12629-DE** Ausgabe 0
Projektnummer 3589010
Seite 1 von 1

Ausgestellt von: NMi Certin B.V., anerkannte Konformitätsbewertungsstelle für Konformitätsbewertungsverfahren gemäß den Modulen in der Mess- und Eichverordnung vom 11. Dezember 2014, Artikel 1, Abschnitt 2, §9 (MessEV), nach Feststellung der Konformität im Rahmen der geltenden Anforderungen der Mess- und Eichverordnung, für:

Hersteller: Sungrow Power Supply Co. Ltd. No.1699 Xiyou Rd., New & High Technology Industrial Development Zone, 230088, Hefei P.R. China

Messinstrument: Eine **Ladesäule für Elektrofahrzeuge**

Typ : IDC180E

Anwendung : öffentlichen und halböffentlichen Bereich

Genauigkeitsklasse : B (250A Cable), A (380A Cable)

Weitere Eigenschaften sind in den Anhängen beschrieben:
- Beschreibung T12629-DE Ausgabe 0;
- Dokumentationsordner T12629-DE-1.

Gemäß: Anhang 4, Modul B der Mess- und Eichverordnung vom 11.12.2014 (BGBl. I 5. 2010)

Erste Ausgabe: 28. November 2023

Gültig bis: 28. November 2033

Ausstellungsbehörde: **NMi Certin B.V., Benannte Konformitätsbewertungsstelle Kennnummer 0122**
28. November 2023
Certification Board

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PHOTOCICS RvA C 681

Eichrecht Module B

Baumusterprüfbescheinigung

Nummer **T12629-DE** Ausgabe 0
Projektnummer 3589010
Seite 1 von 1

Ausgestellt von: NMi Certin B.V., anerkannte Konformitätsbewertungsstelle für Konformitätsbewertungsverfahren gemäß den Modulen in der Mess- und Eichverordnung vom 11. Dezember 2014, Artikel 1, Abschnitt 2, §9 (MessEV), nach Feststellung der Konformität im Rahmen der geltenden Anforderungen der Mess- und Eichverordnung, für:

Hersteller: Sungrow Power Supply Co. Ltd. No.1699 Xiyou Rd., New & High Technology Industrial Development Zone, 230088, Hefei P.R. China

Messinstrument: Eine **Ladesäule für Elektrofahrzeuge**

Typ : IDC180E

Anwendung : öffentlichen und halböffentlichen Bereich

Genauigkeitsklasse : B (250A Cable), A (380A Cable)

Weitere Eigenschaften sind in den Anhängen beschrieben:
- Beschreibung T12629-DE Ausgabe 0;
- Dokumentationsordner T12629-DE-1.

Gemäß: Anhang 4, Modul B der Mess- und Eichverordnung vom 11.12.2014 (BGBl. I 5. 2010)

Erste Ausgabe: 28. November 2023

Gültig bis: 28. November 2033

Ausstellungsbehörde: **NMi Certin B.V., Benannte Konformitätsbewertungsstelle Kennnummer 0122**
28. November 2023
Certification Board

NMi Certin B.V.
Thijsseweg 11
2629JA Delft
Nederlande
T +31 88 636 2332
certin@nmi.nl
www.nmi.nl

Dieses Dokument wird unter dem Vorbehalt ausgestellt, dass keine Haftung übernommen wird und das der Hersteller die Haftung gegenüber Dritten freistellt.

Nur die Vervielfältigung des gesamten Dokuments ist erlaubt.

Dieses Dokument ist digital signiert und geschützt. Die digitale Signatur kann in dem blauen Band am oberen Rand der elektronischen Version dieses Zertifikates überprüft werden.

PHOTOCICS RvA C 681

PTB
Physikalisch-Technische Bundesanstalt
Nationales Metrologieinstitut

Eichrecht Complaint

Sungrow DC charging stations achieved certification under the rigorous German Eichrecht standard. This milestone, accompanied by the certification of Module B and Module D, underscores our product's strength and team's professionalism.

Eichrecht certification, the latest German measurement method, ensures the precision and accountability of energy measurement in charging stations. It's crucial for accurate cost calculation and data recording, meeting mandatory regulatory standards for local operators.

Moving forward, our teams will continue collaborating to enhance our product's competitiveness and strive to create world-class charging solutions.

DC Chargers Certification

UKCA CB RED DIN SPEC 70121

Attestation of Conformity

CB TEST CERTIFICATE

CERTIFICATE

CERTIFICATE

AC Chargers Certification

UKCA TUV RED

Attestation of Conformity

CERTIFICATE

Attestation of Conformity

WEEE Certification

Sungrow has registered WEEE number to ensure that we fulfill product responsibility and all E-waste will be recycled/re-used and effectively managed.

SUNGROW
Clean power for all

Sungrow Deutschland GmbH
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Fax. +49 (0)89 998241401
germany@sungrow-emea.com
www.en.sungrowpower.com

München, den 08.06.2021

Sungrow WEEE Declaration for Germany

Dear customer

Sungrow Deutschland GmbH is compliant to the European WEEE legislation and is fulfilling its producer obligations as follows:

1. Sungrow Deutschland GmbH is registered at the national WEEE register Stiftung EAR under the Registration Number: 28316743
2. Sungrow Deutschland GmbH ensures that all products put on the German market and which falls under the WEEE scope will be reported to Stiftung EAR on a monthly basis.
3. Sungrow Deutschland GmbH guarantees financing of his future waste operations through GEEE Service GmbH. GEE customer number GEC1074
4. Sungrow Deutschland GmbH has chosen PVCycle as his WEEE compliance partner in Germany and all WEEE relevant EU member states.

i.A. Stefan Fröbbse
CFO Europe

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i.A. Stefan Fröbbse
CFO Europe

Subsidy&List

Office for Zero Emission Vehicles

UK

ena energynetworks association

UK

ADVENIR

France

seai SUSTAINABLE ENERGY AUTHORITY OF IRELAND

Ireland

ARERA Autorità di Regolazione per Energia Reti e Ambiente

Italy

KFW Bank aus Verantwortung

Germany

SUNGROW Service

SUNGROW has always kept the serving concept of custom orientation. By means of rigorous training, company has forged a team of professionals with high efficiency. With certificate of proven skills and knowledges, service teams can guarantee service quality and safety. Relying on the complete global service network, SUNGROW sustains stable operations of the projects and brings more profits for clients constantly.

Pre-sales/under-sales service

Project consulting
PV plant experience
Training and guidance
Technical support
Installation & debugging
Intelligent services

After-sales service and in-depth service

System online monitoring
Tour- inspection & upgrading
Maintenance
Generation performance evaluation and optimization
Cloud platform service

Service response time

24h China | **48h** Overseas

SUNGROW services cover more than 50% of the world's countries and regions

90+
Service Centers

400+
Authorized Service Partners

515GW+
Accumulatively Warranted Power Plants Capacity

SUNGROW

Project References

Semi-public EV charging station in Burgenland, Austria

Highway fast EV charging station in Bern, Austria

Highway fast EV charging station in Ezero, Bulgaria

DC fast EV charging station in Moormerland, Germany

Public fast EV charging station in Switzerland

Bus fast EV charging station in France

Public EV charging station
in Australia

EV charging station for taxi
in Coburg, Germany

BYD European HQ EV charging station
in Schiedam, Netherlands

Semi-public EV charging station
in Cyprus, Greece

Seaside resorts charging station
in Sozopol, Bulgaria

Resort EV charging station in Crete, Greece

Police EV charging station in Muri, Switzerland

Hardware store chain EV charging station
in Groningen, Netherlands

Medical center EV charging station
in Razgrad, Bulgaria

Sunny beach EV charging station in Bulgaria

Workplace EV charging station
in Herentals, Belgium

Warehouse EV charging station
in Sydney, Australia

Factory EV charging station in Pernik, Bulgaria

Office EV charging station in Australia

Swimming pools EV charging station
in Temse, Belgium

Residential EV charging station in Dubai, UAE

Residential charging station in London, England

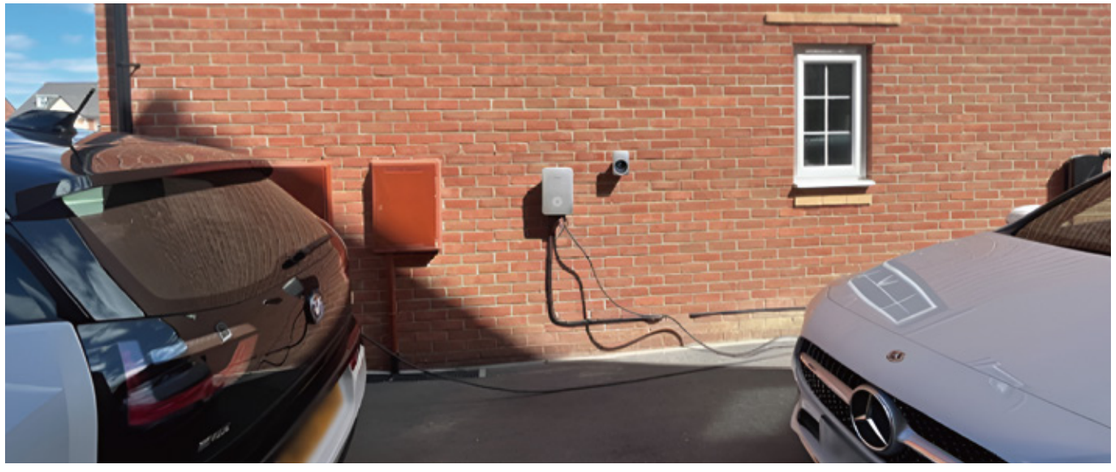
Residential charging station in Pamplona, Spain

Office area EV charging station
in Munich, Germany

Semi-public PV + ESS+ Charger station
in Prato, Italy

Residential PV+ESS+Charger station, Germany

Laboratory charging station in Delft, Netherlands



Residential charging station in Milton Keynes, England

Highway service area PV+ESS+Charger station in Anhui province, China

PV+ESS+Charger station in Sungrow HQ in Hefei,China

Leshui public fast EV charging station in Anhui province, China

The first on-street parking EV charging station in Shanghai, China

Tangxihe Park fast EV charging station in Anhui province, China

Baoan Fengtang fast EV charging station in Shenzhen, China

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