

**You want to  
get the most out of  
your PV plants?**

Seems like you should  
get to know us!





# Clean Power for All.



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# We have the solution for your project!

We started with an idea – harnessing the solar energy for human use. This idea formed into a business in 1997. Since then – we have never looked back. **We are present in more than 150 countries in the world and have built a professional workforce of 7000 employees worldwide.**

As a smart energy inverter provider our aim is to to maximise the energy output in the PV systems. Our **‘innovation first’** mindset is what makes us unique in the industry. To ensure **we are at the cutting edge of technology**, we have the largest taskforce to develop products for all types of solar projects.

We have proved ourselves in Europe, now **it’s time to continue our winning streak** – we are ready to offer a range of PV inverter solutions to all the types of European markets.

**Moritz Rolf**  
Director Central + Eastern  
Europe, Nordics, Turkey

**Javier Izcue Elizalde**  
Director Southern Europe



For every application and system size, Sungrow has the solution for your project. With a dedicated team of experts in presales support, system engineering and project execution – we make sure that your project becomes a success story. Many top Tier customers are meanwhile committed to Sungrow because we keep what we promise!





340+ GW  
INSTALLED  
WORLDWIDE

With more than 340 gigawatts installed worldwide, Sungrow is the first company to reach this milestone. The journey to the top has been challenging, but a rewarding one.

We give a platform to new perspectives, and like-minded individuals who want to contribute to the progress and development of clean energy.

Sungrow is a true pioneer in the solar industry. Our vast expertise range in **residential, commercial, large-scale utility, floating solar, energy storage and EV charging**. Sungrow is truly a one stop destination for all your inverter demands.

Sungrow started with humble beginnings. Our journey began in 1997, from one man with a vision – Professor Renxian Cao, and his passion to be part of the green revolution. Now various years and hard work later, Sungrow is a **world leader** in the PV inverter manufacturing industry. Within two decades, the company has supplied its inverters to **more than 150 countries**, opened its offices in more than **20 countries for local onsite support**.



24 MW PV plant with SG6250HV-MV in Palencia, Spain



OUR STORY

NO.1

BANKABLE

INVERTER

BRAND

NO.1

PV INVERTER

SUPPLIER

BRAND

Best in class – Sungrow has been ranked **‘most bankable inverter’ four years in a row**, by BloombergNEF, 2022.

Sungrow Ranks No.1 in 2022 Global PV Inverter Shipment, estimated by IHS Markit now a part of S&P Global.

The survey features the **reliability and economic stability** of a clean tech company. What does it mean for you? Companies partnering with Sungrow are at **an advantage to gain financial support** from the institutions due to the trust and credibility the brand has established in the market.



Reliability of warranties and insurance



Local service and support

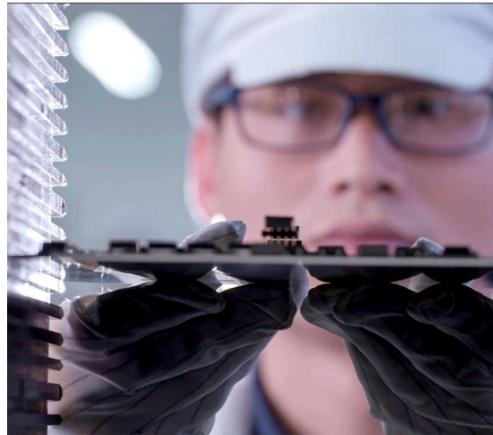


Excellent product quality

# FOCUS ON INNOVATION

## BUILDING THE NEXT GENERATION PRODUCTS

We focus on the best – for you. That is why more than 40% of our workforce is dedicated in maintaining the superior industry standards we have become known for.



Excellent work is the only route to achieve our mission: Clean Power for All! Sungrow has applied for 5300 patents, ranking first in the industry.

Sungrow maintains long-term cooperation with international universities like Tsinghua University, University of New South Wales, and Hefei University of Technology to recruit creative and problem-solving minds who share our aim to fight for the clean energy.



## BRINGING YOU SUPERIOR QUALITY!

Sungrow has an **industry-leading testing centre** certified by all major international certification bodies including TÜV Rhineland, TÜV SÜD, CSA, UL and CNAS. Sungrow inverters have passed over one thousand independent quality and reliability tests, a feat unmatched by most inverter manufacturers.

As a world leader inverter supplier, Sungrow prioritises the importance of product press

control and technology upgrading. That is why Sungrow has invested in the most **state-of-the-art equipment to give you the highest quality products you deserve.**

The 10m Anechoic Chamber, first of its kind in the industry, has the capacity to test large equipment such as a **PV inverter turnkey station as large as 5 MW and as heavy as 20 tons.**

# THE WORLD'S LARGEST EMC CHAMBER



Sungrow's state of the art EMC chamber can test large electrical equipment like a PV inverter turnkey station as large as 5 MW and as heavy as 20 tons at a distance of 10 m

# THE STARS WHO BRING MAGIC TO LIFE

## OUR LOCAL FOOTPRINT

Sungrow – a multinational company who believes that language is core to a culture.

With a workforce of **over 350 employees in Europe**, we are more than ready to assist you in your preferred language.

To understand the need for the European market, Sungrow has a dedicated

system engineering team, focusing on **grid integration and System Solutions**, in Pamplona, Spain and Munich, Germany.

Our System Solutions offer the right consultation from the start, with the focus on providing an optimized solution to fit our client's PV plant.

We support our project clients with

the sizing of the plant, to **ensure the compliance of active and reactive power** required at the point of connection, based on the EU631 country requirements, among others.



**On-site with you:**  
Your success is our success!



**One of the largest PV plants in Germany with Sungrow inverters in Tramm-Göthen:**  
172 MWp with SG3125HV-20 plus 7.2 MV skid



# THE HEART OF A SOLAR SYSTEM

## OUR PRODUCT RANGE

**Sungrow is known for its adaptability and fast response to market requirements.** To manage varied needs for different markets, we offer the option of customised inverters.

The perfect recipe to harness solar as an energy source: PV module, DC/AC inverter and grid. The inverter sits at the heart of this system. Superior quality inverters are required to do the heavy lifting.

That is why we have created a range of inverters to manage the different loads at a given project site.



No matter where you or your project are, no matter what your needs are – we are there for you.

# CENTRAL INVERTERS

Complete system solution for your next solar park.



## CENTRAL INVERTERS

3,125 MVA

**High power into small space** Compact solution for outdoor application, shipped with a standard 10 ft container. The 3.125 MVA powerhouse includes effective cooling, L/HVRT, power ramp rate control and active & reactive power control. All you need for your large-scale PV plant.

SG3125HV-30



## CENTRAL TURNKEY SOLUTIONS

UP TO 6,250 MVA

**All-in-One for the faster commissioning** Sungrow turnkey solutions include inverter, low voltage panel, transformer, medium voltage switchboard, auxiliary transformer in a 20 or 40 feet container. That enables quick and easy delivery on-site, as well as a very fast commissioning.

SG3125HV-MV-30, SG6250HV-MV



## 1+X MODULAR INVERTER

UP TO 8,8 MVA

**Modular solution for your tailor-made PV plant** Take the central solutions to the next level. All the advantages of central and string inverters combined. 1,1 to 8,8 MVA block flexible design to fit your project with modular outdoor inverters, plug&play installation including wireless communication.

SG1100UD, SG3300UD, SG4400UD, SG6600UD, SG8800UD



## TURNKEY SOLUTION FOR 1+X MODULAR INVERTER

UP TO 8,8 MVA

**All-inclusive for the faster commissioning** Integrated transformer, MV switchgear and LV auxiliary power supply for power conversion up to 8,8 MVA delivered in all-inclusive containers, ready to be installed on-site. More reliability thanks to the inverters and MV factory test.

SG1100UD-MV, SG3300UD-MV, SG4400UD-MV, SG6600UD-MV, SG8800UD-MV

# THE 1+X MODULAR



## SUNGROW'S FIRST MODULAR SOLUTION FOR UTILITY!

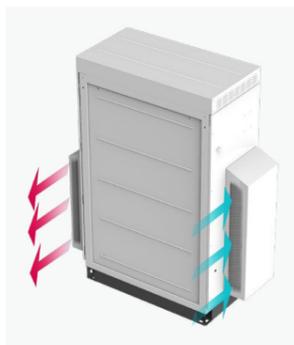
Combine **up to 8 modules** together, expanding the conversion capacity up to 8,8 MW to fit your project needs. Get a **multi MPPT solution** with central inverter layout and save costs due to **low transportation and installation efforts and its outdoor design.**

One single unit power conversion is 1.100 kVA and sizes 700 x 2140 x 1690 mm, 800 kg heavy.

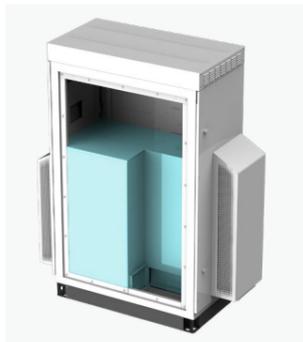
### Heat dissipation

#### Convenient for parallel installation:

Short air duct, hot & cold air interference-free for electro-cavity.



HERO PRODUCT



### Independent Cavity

#### Electronic components are sealed in electro-cavity:

IP65 reactor & fans in heat dissipation cavity, electronic components in separate electro-cavity with overhead heat exchanger.

### Modularization

#### Plug and play

#### Maintenance without professionals:

More convenient O&M: backup of the inverter can be on-site, replaced directly in case of fault with reduced maintenance time.



# STRING

# INVERTERS & MVS

Complete system solution for your next solar park.



STRING INVERTERS

UP TO 350 kVA

**Smart and strong** The best solution for hilly terrains or different-oriented PV modules projects. These multi-MPPT inverters give the maximum output in every condition, with longer lasting support thanks to the IP66 protection degree, the smart cooling system and the C5 protection against corrosion.

SG125HX, SG350HX



Credits: BELECTRIC



MVS FOR STRING INVERTERS

UP TO 8,96 MVA

**Medium voltage stations complete your PV plant** This tailor made solution makes for a perfect addition to your multi-megawatt PV plant. This powerful system includes a transformer, medium voltage switch board, auxiliary transformer in a 20 ft container, ready to connect to the inverters.

MVS3150-LV, MVS6300-LV, MVS6750-LV, MVS3200-LV, MVS4480-LV, MVS6400-LV, MVS8960-LV

# ESS, PCS AND BATTERY

Utility storage solution for your solar park.



## UTILITY ENERGY STORAGE SYSTEMS

UP TO 3,450 MVA  
UP TO 7,454 MWh

**All-inclusive ESS** Highly integrated Energy Storage Systems for easy transportation and O&M. Long-lasting life and high performance thanks to air conditioning or liquid cooling systems with intelligent cell-level temperature control that ensures higher efficiency and longer battery cycle life.

ST2236UX, ST2752UX, ST3440KWH(L)-3150UD-MV, ST3727KWH(L)-3450UD-MV, ST6710KWH(L)-3150UD-MV, ST7454KWH(L)-3450UD-MV



## C&I ENERGY STORAGE SYSTEMS

UP TO 250 kW  
UP TO 1145 kWh

**Scalable configuration** Supports the parallel use of multiple systems, for commercial and industrial ESS, covering a storage capacity up to 2 MWh. Cloud technology enables remote maintenance and monitoring and built-in EMS with multiple operation mode selection increase revenue.

ST535kWh-250kW-2h, ST570kWh-250kW-2h, ST1070kWh-250kW-4h, ST1145kWh-250kW-4h



## PCS AND DC/DC SOLUTIONS

UP TO 6,9 MVA

**Flexible and compact storage** Power converters to connect the Battery Storage System both on the AC side and on the DC side of utility-scale PV plants. Integration with Smart EMS to realise self-consumption, peak-shaving, frequency regulation and other ancillary services delivery stable and powerful supply to the renewable grid.

SC1200UD, SC1375UD, SC1575UD, SC1725UD, SC2000UD, SC2500UD, SC2750UD-MV, SC3150UD-MV, SC3450UD-MV, SC4000UD-MV, SC5000UD-MV, SC5500UD-MV, SC6300UD-MV, SC6900UD-MV



## BATTERY AND BATTERY RACKS

UP TO 4,4 MWh

**LFP Li-ion Battery Systems** 20-year service life with more than 8000 times system-level cycle life, this batteries support 1500V system, reducing AC side losses. With a deep charge & discharge design, they are delivered in racks and containers up to 40-feet holding up to 4,4 MWh.

M2L-M143, M2L-R372, P573-111, P573B-111, R344-111, P573AL-112, P573BL-112, P286BL-112, R372-112

# SOLAR PLUS

# STORAGE FARM

In Yorkshire, UK, a 25 MW & ESS: 27.5 MW / 30.14 MWh project meets the modern grid infrastructure needs in the region



It's the first and largest PV + ESS project in Europe. Intelligent energy storage that allows to shift energy to a time where it is of greatest value, and to provide grid services around the clock.

**Andrew Lycett**  
Country Manager, Sungrow UK



# POWERTITAN

# WORTH THE HYPE

## SUNGROW'S LEADING ESS SOLUTION!

Liquid cooled technology is used for the thermal management of Battery during the operation. This is a big difference compared with the existing mainstream technology which is Air-cooled.

This new technology allows the pre-installed Battery Modules to reduce the shipment as well as installation cost.

### Higher discharge

- Higher efficiency
- Better cell temp. consistency to reduce barrel effect
- Lower Aux power consumption



Liquid cooled energy storage system unit ST2752UX

### Low costs

- Pre-installed modules to reduce installation cost
- Highly integrated design, using up to -34% lesser land area
- Liquid cooled technology with auxiliary consumption reduced by up to 50%

### Beyond flexibility

- Cluster-level energy management
- Easy to configure O&M
- Mix of old and new batteries possible
- Easy to expand

HERO PRODUCT

# INSTANT UPDATES

Sungrow provides you with the perfect solutions for controlling and monitoring your utility-scale PV projects.



## MONITORING



### Smart Communication Box & Energy Management Unit

Flexible Networking with RS485, Ethernet and MPLC communication  
 Inverter batch parameter settings and firmware updates  
 Active and reactive power control  
 IP65 protection



### Intelligent communication

Logger 3000:  
 Communication with up to 200 devices  
 Logger4000:  
 Communication with up to 300 devices  
 Automatically distributing Modbus



### The value of partnerships

Sungrow's long lasting partnership with premium monitoring brands like Inaccess, Gantner, Green Power Monitor Zebotec and many more provide perfect monitoring solutions for your pv plant.

Stay up-to-date, no matter where you are!

## ACCESSORIES



### COMBINER BOXES

**The best connection between pv field and inverters** - These combiner boxes include string current and voltage monitoring. Efficient and safe due to 1500V-Specific PV fuse, both positive and negative terminal, plus 1500V-Specific PV SPD with fault alarm.

PVS-16MH, PVS-18MH, PVS-20MH, PVS-24MH



### iSolarCloud

fast, free, and easy to use

**iSolarCloud** - Superior Monitoring on the go, higher yield. Get the most out of your PV plant with our free to use platform. Access smart features such as remote troubleshooting, mass parameter setting or smart reporting. The iSolarCloud App is 100% GDPR compliant – your security is our top priority.





# 90 MW UTILITY SCALE PROJECT

In Gaarz, Germany



**Stefan Müller**  
CEO, Enerparc

Highest quality output!

We have been using Sungrow inverters for several years now and are very satisfied with them. The Sungrow brand ensures the highest quality output and for us, it is a safe investment to work with Sungrow.

This project used a mix of **SG3125HV-20** and **SG110CX** inverters and **7200kVA** and **36000kVA** MV stations for grid connectivity. The design required application of string and central inverters to fit the requirements of scattered sizes. The **SG3125HV-20** aided with **easy installation and O&M**. The SG110CX inverters help with remote monitoring and fast troubleshooting. Energisation took place in early 2022.

**Did you know?**

Sungrow has installed **more than 20 GW in Europe**, and **340 GW** worldwide by Dec 2022



**Large scale utility project in Germany:** Enerparc's 100MW plant with SG3125HV-20 and SG110CX.

# SAVING THE SUN – OUR ENERGY STORAGE OPTIONS

Sungrow is listed as one of the top battery storage companies in the world. Our ESS products, combined with the Samsung SDI technology, are built to be utilised in residential, commercial, and large-scale utility projects.

With more than 6GW installed worldwide, Sungrow's Storage division is expanding rapidly in the European region. Currently, **our storage system is leading in the UK** (one of the largest markets for ESS), **with over 25% market share** (as of 2021).

With the rapidly expanding ESS team, **we will expand our market to all of Europe** – that's a promise!

**James Li**  
Head of Technical ESS



**The largest unsubsidized grid-connected standalone battery storage plant in Europe: 100MW/100MWh**  
Energy Storage plant at the 400kV UK national grid substation in Minety, UK.



Sungrow has already proven itself as a world leader in PV inverter solutions. (IHS Markit Ranking, 2022)

With more than 16 years of experience in Storage systems, we want to make it easier for clients with a 'one stop shop' convenience for PV and storage inverter solution systems. Relying on its cutting-edge renewable power conversion technology and industry-leading battery technology, Sungrow focuses on integrated energy storage system solutions.

# NEW URBAN DC CHARGING

## IDC30E



### EFFICIENT

Efficiency up to 96.5 %, along with a standby power consumption of 10 W



### RELIABLE

IP 65, dust & rain proof, with a service lifetime of over 10 years



### FRIENDLY

Extreme low noise of  $\leq 50$  dB as well as EMC of Class B residential emission



### FUTURE-PROOF

Compatibility with new cars and backends, while having an easy integration with PV and battery systems



The noise level of **50 dB** is adequate for a residential area and is comparably quieter than a regular cooling fan used at home.



IDC30E is equipped with a **CCS2 plug** which is the principal DC charging standard used throughout Europe.



Sungrow EV chargers are **compatible with current and future electric car models**.



The charger can be installed both **on the wall and on a pole optionally**.



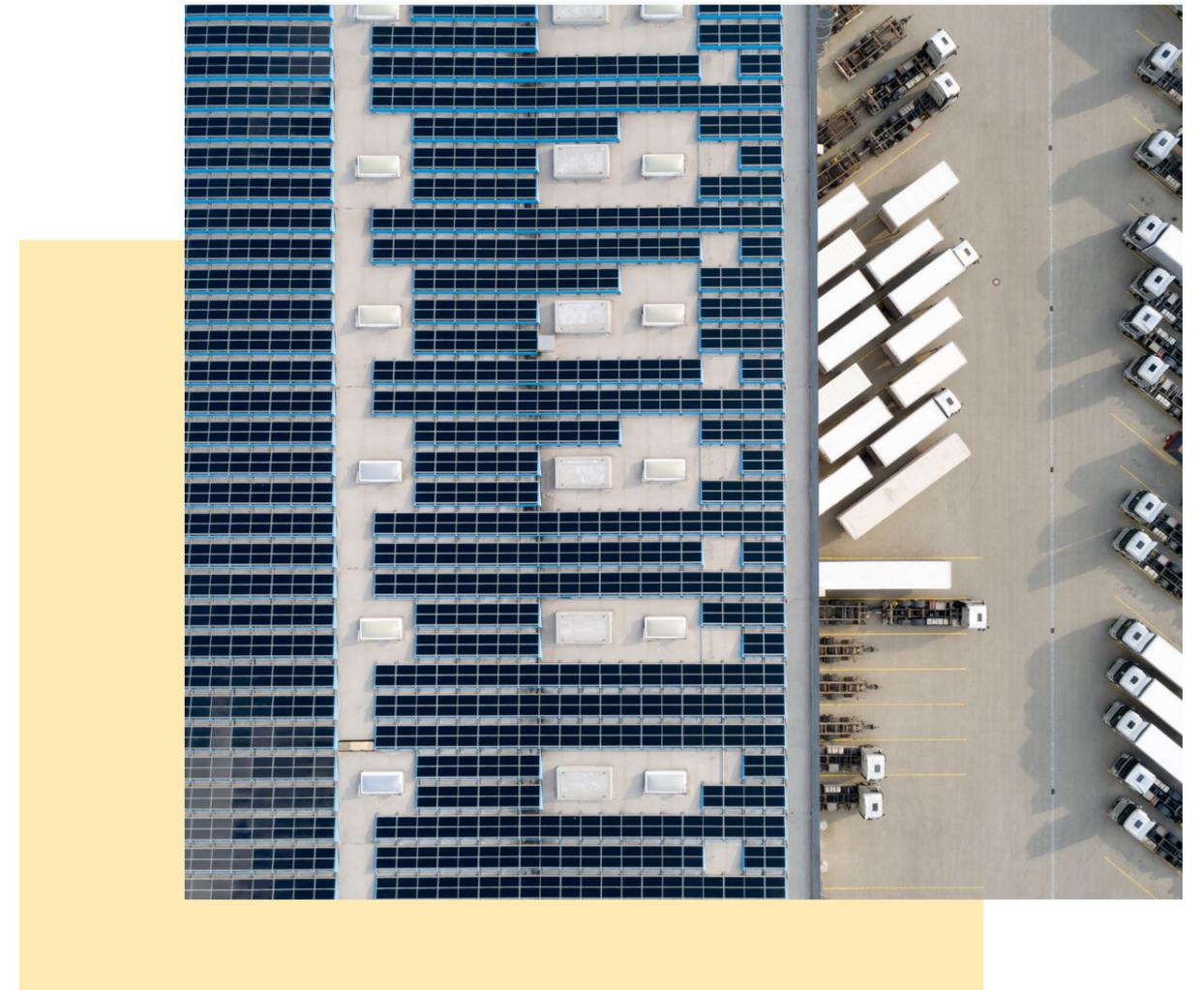
Our 30 kW DC charger is able to **charge EV batteries between 200 to 1000 V<sub>DC</sub>** which covers all the EV car brands to date. Its maximum output current is 80 A. It can resist harsh outdoor conditions such as wet, dusty and salty environments thanks to its IP 65 rating. The electrical emissions are suitable for residential purposes (EMC Class B).

# WE ARE HERE FOR YOU

Our 'customer first' approach to service

Service is the key to **optimal performance and higher yields in PV systems**. Our service range is active in more than **16 countries in Europe**. Our vast network of partners in the continent further allows us to provide a **fast response to on-site and off-site maintenance in Europe, North Africa, and the Middle East**.

We believe in comprehensive service – That's why we don't just offer traditional service options, we provide you a comprehensive hands-on training covering operations, maintenance, and product management for your installation.



**Tao Gu**  
Sungrow Service Director Europe

To support our partners and customers in Europe, we are **working harder than ever before** so we can deliver a reliable service network and infrastructure in your region.

# TRAINING

# OPPORTUNITIES

Being prepared  
in all scenarios

We want to give you the skill set to ensure a smooth and safe function of your PV plant – we offer you the **opportunity to master the art of our PV inverters!**

With our state-of-the-art **Sungrow Academies** in Spain and Germany, learn all about the **day-to-day handling** and operation of our

inverters with **on-site or online seminars with the Sungrow experts.** You will have a **comprehensive hands-on learning environment** to adapt to the ever-evolving PV technological trends. To top it up, we also offer a recognised certification to all the successful participants. That's an offer too good to give up!

**Live trainings, just for you!** We have built state-of-the-art training centres to **give you the right support** for your needs.



**16** ● Service Partners for On-Site Service    **5** ● Hotlines    **3** ● Repair Centers    **2** ● Training centres

●● Service Level 1 & 2    ○ Service Level 3

# FACES OF SUNGROW

Sit back and relax

We will take care  
of the rest!



**Raphael Henkel**  
Head of Northern Europe

**Moritz Rolf**  
Director Central + Eastern  
Europe, Turkey & Nordics

**Robert Von Wahl**  
Head of CEE



**Estefania Taibo**  
Team Lead  
Project Management  
Southern Europe



**Artur Gaj**  
Key Account Manager  
Poland - Sungrow Europe



**Javier Blanco**  
Regional Senior Solution Manager



**Friederike Schams**  
Head of Marketing  
Europe



**Manuel Seidenkranz**  
Project Manager,  
Sungrow Europe



**Vittoria Gratarola**  
Product Manager



**Jane (Jie) Gao**  
Senior Solution Engineer EV  
Charging Europe

**Want to know  
what more  
we can offer?  
Let's connect!**

Learn more on  
[www.sungrowpower.com](http://www.sungrowpower.com)