



# ABOUT KSTAR

• **1996**

## Overseas Expansion

Enter the European and US Market

**1993**

## KSTAR Established

Enter Offline UPS Field

• **2004**

## Further Development

Enter High-power Online UPS Field

**1998**

## New Manufacturing Base

Guanlan Industrial Park  
Inaugurated in Shenzhen

• **2010**

## IPO and Public Debut

Listed in Shenzhen Stock  
Exchange

**2009**

## Enter New Energy Field

1<sup>st</sup> PV Inverter Produced

• **2015**

## National Certified Technology Center

Certified by National Quality  
Management System

**2013**

## Explore New Opportunities

Enter the Electric Vehicles  
Market

• **2023**

## KSTAR Vietnam

Vietnam Plant in Operation

## National-level Green Factory

**2021**

## Further Invest in ESS Facilities

Open Jiangxi Changxin Gold  
Sunshine Power Supply Co.,Ltd

**2019**

## CATL & KSTAR Partnership

Establish Joint Venture Factory  
with CATL

• **2025**

## Jiangxi Gold Sunshine

Launches advanced punched  
grid plate production

**2024**

## Construction of the High-end New Energy and Energy Storage Industrial Base



# Unlock new business mode independently

KSTAR, a leading global new energy solution provider founded in 1993, excels in key solar markets worldwide. Our expertise spans the spectrum, delivering cutting-edge PV inverters and energy storage systems for residential, commercial & industrial, and large-scale utility needs.

solutions for a diverse clientele in 180 countries and regions, with an impressive 68GW of KSTAR products already installed globally.

We are always generating superior solutions for energy and more. Let's power the future together.

Backed by 30+ years of experience in electrical and electronic technology, KSTAR is committed to superior new energy



# 180+

Countries & Regions

# 68GW

PV Installation

# 30+

Years History

# Thriving Three Decades: The Superior *K*lean Utility Solution

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# BlueWave Series NEW

Three Phase / 1500 Vdc / 350 kW

## Lower CapEx and OpEx

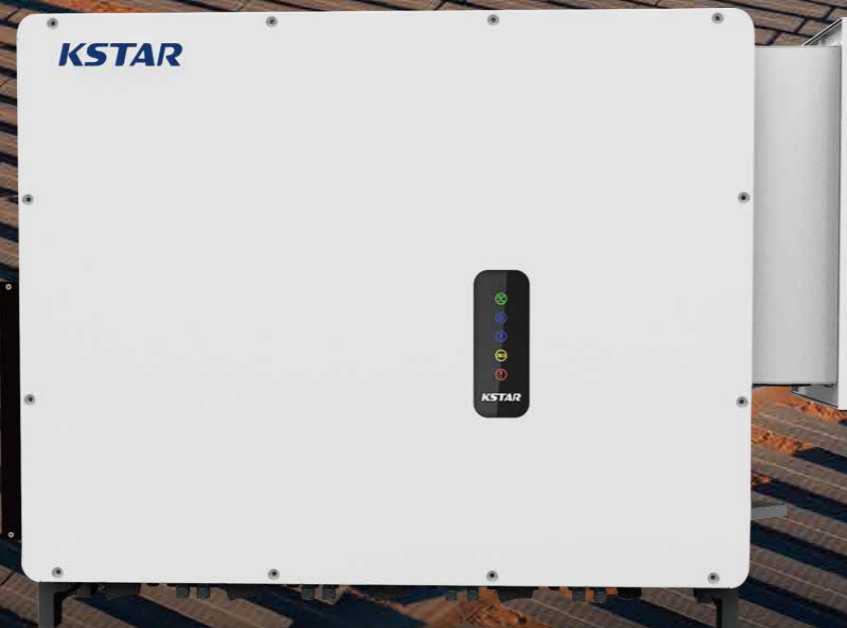
- ▶ Power Line Communication (PLC)
- ▶ Night SVG Function
- ▶ Support Both Al and Cu Cable

## Maximize Solar Yield

- ▶ 16 Independent MPPT
- ▶ Max. Efficiency up to 99%
- ▶ Smart I-V Curve Scan

## Improved Safety

- ▶ Type II DC & AC SPD
- ▶ Anti-PID Function
- ▶ AFCI Optional





MODEL	G350KTHC	G350KTH
<b>Input (DC)</b>		
Max. DC Voltage	1500 V	
Max. Input Current per MPPT	30 A	40 A
Max. Short-circuit Current per MPPT	45 A	60 A
Start Voltage	650 V	
MPPT Voltage Range	500 V ~ 1500 V	
Number of Strings	32	24
Number of MPPT	16	12
Strings per MPPT	2	
<b>Output (AC)</b>		
Nominal AC Output Power	350 kW	
Max. AC Apparent Power	352 kVA	
Nominal AC Voltage	800 V, 3W+PE	
Nominal Frequency	50 / 60 Hz ±5Hz	
Frequency Range	45 ~ 55 Hz / 55 ~ 65 Hz	
Max. Output Current	254 A	
Power Factor (cosΦ)	0.8 leading - 0.8 lagging	
THDi	< 3% (at nominal power)	
<b>Efficiency</b>		
Max. Efficiency	99%	
<b>Protection Devices</b>		
DC Switch	Yes	
Anti-islanding Protection	Yes	
Over Current Protection	Yes	
DC Reverse Polarity Protection	Yes	
String Fault Detection	Yes	
DC / AC Surge Protection	Type II	
AC Short Circuit Protection	Yes	
Residual Current Detection	Yes	
PID Recovery	Optional	
Night SVG Function	Optional	
<b>General Specifications</b>		
Dimensions (W x H x D)	1180 x 860 x 362 mm	
Weight	125 kg	
Operating Temperature Range	-30 ~ 60°C	
Cooling Type	Fan Cooling	
Max. Operation Altitude	5000 m (> 3000 m Derating)	
Max. Operating Humidity	0 ~ 100% (non-condensing)	
AC Output Terminal Type	OT terminal	
IP Class	IP66	
Noise (dB)	≤ 75 dB	
Topology	Transformerless	
Communication	Modbus RS-485 / PLC	
Display	LED, Buletooth+APP	





# MV Central Inverter

Outdoor / 1500 Vdc / 2500–3125 kW

 Max. PV Voltage up to 1500 V  
DC / AC Ratio up to 1.8

 AGC / AVC, Night SVG Function  
LVRT / HVRT / FRT Function

 Full Power Output under 55°C  
IP55 for Outdoor Use

 Modular Design for Easy Maintenance  
Max. 18 DC Inputs


MODEL	GSM2500D	GSM3125D
<b>Input (DC)</b>		
Max. DC Input Voltage	1500 Vdc	
Min./Start Voltage	860 ~ 940 V (adjustable)	
MPPT Voltage Range	875 ~ 1300 V	
No. of MPPT	2	
No. of DC Input	Max. 18	
Max. DC Input Current <sup>1)</sup>	3207 A	4009 A
<b>Output (AC)</b>		
Rated AC Output Power	2500 kW	3125 kW
Max. AC Output Apparent Power	2750 kVA	3437 kVA
Rated AC Voltage	600 Vac, 3W+PE	
AC Voltage Range	510 Vac ~ 660 Vac	
Rated Grid Frequency	50 / 60 Hz	
AC Grid Frequency Range	45 ~ 55 Hz / 55 ~ 65 Hz (adjustable)	
Rated Output Current	2406 A	3007 A
Max. Output Current	2646 A	3308 A
Power Factor (cosΦ)	0.8 leading - 0.8 lagging	
THDi	< 3% (at nominal power)	
<b>Efficiency</b>		
Max. Efficiency	99.00%	
Euro Efficiency	98.70%	
<b>Protection</b>		
DC Input Protection	Load Break Switch + Fuse	
AC Output Protection	Circuit Breaker	
Surge Protection	DC Type I+II; AC Type II	
Anti-islanding Protection	Yes	
Insulation Monitoring	Yes	
Leakage Current Monitoring	Yes	
Overheat Protection	Yes	
DC Reverse Polarity Protection	Yes	
AC Short-circuit Protection	Yes	
Anti-PID Function	Optional	
<b>General Specifications</b>		
Dimensions (W x H x D)	2725 x 2350 x 1602 mm	
Weight	3.5 t	
IP Class	IP55	
Topology	Transformerless	
Operating Ambient Temperature Range	-40 ~ + 60°C ( > 50°C derating )	
Operating Relative Humidity Range	0 ~ 100%	
Max. Operating Altitude	4000 m ( > 3000 m derating )	
Cooling Method	Forced Air Cooling	
Power Consumption at Night	< 250 W	
Communication	Modbus RS-485	
Display	Touch Screen	


<sup>1)</sup> Limited by software under DC input voltage of 875 V.


# MV Power Station


Turnkey solution for large-scale PV plants

20-ft Standard Container / All-in-one / 2500–3125 kW

 Max. PV Voltage up to 1500 V  
DC / AC Ratio up to 1.8

 AGC / AVC, Night SVG Function  
LVRT / HVRT / FRT Function

 Full Power Output under 50°C  
Support Outdoor Installation

 Modular Design for Easy Maintenance  
Multiple DC Inputs



MODEL	GSM2500D-MV	GSM3125D-MV
<b>Input (DC)</b>		
Max. DC Input Voltage	1500 Vdc	
Min./Start Voltage	860 ~ 940 V (adjustable)	
MPPT Voltage Range	875 ~ 1300 V	
No. of MPPT	2	
No. of DC Input	Max. 18	
Max. DC Input Current <sup>1)</sup>	3207 A	4009 A
<b>Output (AC)</b>		
Rated AC Output Power	2500 kW	3125 kW
Max. AC Output Power	2750 kVA	3437 kVA
Inverter Max. Output Current	2646 A	3308 A
AC Output Voltage	10 ~ 35 kV	
Rated Grid Frequency	50 / 60 Hz	
AC Grid Frequency Range	45 ~ 55 / 55 ~ 65 (adjustable)	
Power Factor (cosΦ)	0.8 leading - 0.8 lagging	
THDi	< 3% (at nominal power)	
<b>Efficiency</b>		
Inverter Max. Efficiency	99.00%	
Inverter Euro Efficiency	98.70%	
<b>Transformer</b>		
Transformer Rated Power	2500 kVA	3125 kVA
Transformer Max. Power	2750 kVA	3437 kVA
LV / MV Voltage	0.6 kV / (10 ~ 35) kV	
Vector Group	Dy 11	
Cooling Type	ONAN	
Oil Type	Mineral Oil (PCB free)	
<b>Protection</b>		
DC Input Protection	Load Break Switch + Fuse	
Inverter AC Output Protection	Circuit Breaker	
AC MV Output Protection	Circuit Breaker	
Surge Protection	DC Type I+II; AC Type II	
Anti-islanding Protection	Yes	
Insulation Monitoring	Yes	
Leakage Current Monitoring	Yes	
Overheat Protection	Yes	
DC Reverse Polarity Protection	Yes	
AC Short-circuit Protection	Yes	
Anti-PID Function	Optional	
<b>General Specifications</b>		
Dimensions (W x H x D)	6058 x 2896 x 2438 mm	
Weight	13 t	
IP Class	Inverter IP55 / Others IP54	
Auxiliary Power Supply	10 kVA	
Operating Ambient Temperature Range	-40 ~ +60°C	
Operating Relative Humidity Range	0 ~ 100% (non-condensing)	
Max. Operating Altitude	1000 m (Standard) / > 1000 m (Optional)	
Cooling Method	Forced Air Cooling	
Communication	IEC 104 Optical Fiber	
Display	Touch Screen	


1) Limited by software under DC input voltage of 875 V.





# MV Power Station

Turnkey solution for large-scale PV plants

40-ft Standard Container / All-in-one / 5000–6250 kW

 Max. PV Voltage up to 1500 V  
DC / AC Ratio up to 1.8

 AGC / AVC Night SVG Function  
LVRT / HVRT / FRT Function

 Max.36 DC Inputs  
IP55 for Outdoor Use


 Modular Design for Easy Maintenance  
Full Power Output under 50°C


MODEL	GSM5000D-MV	GSM6250D-MV
<b>Input (DC)</b>		
Max. DC Input Voltage	1500 Vdc	
Min./Start Voltage	860 ~ 940 V (adjustable)	
MPPT Voltage Range	875 ~ 1300 V	
No. of MPPT	4	
No. of DC Input	Max. 36	
Max. DC Input Current <sup>1)</sup>	6414 A	8018 A
<b>Output (AC)</b>		
Rated AC Output Power	5000 kW	6250 kW
Max. AC Output Power	5500 kVA	6875 kW
Inverter Max. Output Current	5293 A	6616 A
AC Output Voltage	10 ~ 35 kV	
Rated Grid Frequency	50 / 60 Hz	
AC Grid Frequency Range	45 ~ 55 Hz / 55 ~ 65 Hz (adjustable)	
Power Factor (cosΦ)	0.8 leading - 0.8 lagging	
THDi	< 3% (at nominal power)	
<b>Efficiency</b>		
Inverter Max. Efficiency	99.00%	
Inverter Euro Efficiency	98.70%	
<b>Transformer</b>		
Transformer Rated Power	5000 kVA	6250 kVA
Transformer Max. Power	5500 kVA	6875 kVA
LV / MV Voltage	0.6 kV - 0.6 kV / (10 ~ 35) kV	
Vector Group	Dy 11 y11	
Cooling Type	ONAN	
Oil Type	Mineral Oil (PCB free)	
<b>Protection</b>		
DC Input Protection	Load Break Switch + Fuse	
Inverter AC Output Protection	Circuit Breaker	
AC MV Output Protection	Circuit Breaker	
Surge Protection	DC Type I+II; AC Type II	
Anti-islanding Protection	Yes	
Insulation Monitoring	Yes	
Leakage Current Monitoring	Yes	
Overheat Protection	Yes	
DC Reverse Polarity Protection	Yes	
AC Short-circuit Protection	Yes	
Anti-PID Function	Optional	
<b>General Specifications</b>		
Dimensions (W x H x D)	12192 x 2896 x 2438 mm	
Weight	29 t	
IP Class	Inverter IP55 / Others IP54	
Auxiliary Power Supply	10 kVA	
Operating Ambient Temperature Range	-40 ~ +60°C	
Operating Relative Humidity Range	0 ~ 100%	
Max. Operating Altitude	1000 m (Standard) / > 1000 m (Optional)	
Cooling Method	Forced Air Cooling	
Communication	IEC 104 Optical Fiber	
Display	Touch Screen	


<sup>1)</sup> Limited by software under DC input voltage of 875 V.

# KSM-SCS-04

## PV Communication Box

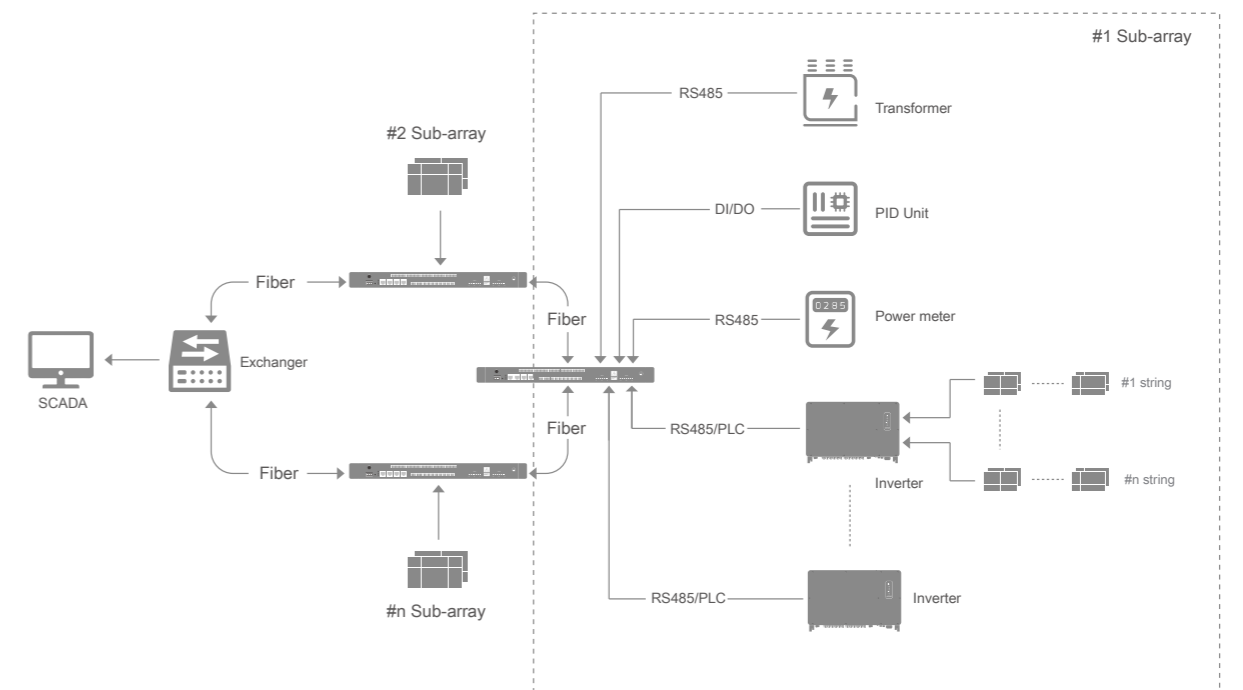
 Multiple Communication:  
RS-485+CAN+PLC+4G (optional)

 Maximum Transmission  
Distance up to 20km

 Built-in High Performance  
Data Collector




MODEL	KSM-SCS-04
<b>Configuration</b>	
Internal Data Collector Model	KSM-DCU-04
Number of RS-485 Port	8
Number of CAN Port	2
Number of PLC Port	1
4G Communication	Optional
Optical Fiber Ring Network	1 pair
Number of FE Ports	4
Number of DI & DO Ports	16*DI; 8*DO
<b>Technical Parameters</b>	
Power Supply Voltage Range	100 ~ 240 Vac
Rated PLC Operating Range	800 Vac
Rated PID Operating Range	800 Vac
Rated Operating Frequency	50 Hz / 60 Hz
<b>Optical Fiber Communication</b>	
Central Wavelength	1310 nm
Transmission Distance	20 km
<b>General</b>	
Operating Temperature Range	-20°C ~ 55°C
Relative Humidity	5% ~ 95% (Non-condensing)
Cable Access Mode	Bottom in & out
Maintenance	Front
Dimensions (W x H x D)	540 x 670 x 290 mm
Weight	31 kg
IP Degree	IP65
Installation	Bracket / Wall Mounting / Pole Mounting








# GSC24-MH

1500Vdc PV Array Combiner Box

 Positive & Negative DC Fuse Protection  
Alarms for PV Array and Blown Fuse

 Real-time Monitoring of the status  
of Fuse, Breaker, and SPD

 IP65 Protection  
Modular Design for Easy and Quick Maintenance

 RS-485 and Modbus-RTU Protocol  
String Current and Voltage Monitoring

MODEL	GSC24-MH
<b>Input</b>	
Max. PV String Parallel Inputs	24
Rated Current for Each String	Optional
Operating Voltage Range	400 ~ 1500 Vdc
System Power	From PV array
Communication	RS-485 / Modbus - RTU protocol , 9600 bps
Isolation Resistance	> 10 MΩ
<b>Physical</b>	
Dimensions (W x H x D)	860 x 655 x 233 mm
Weight	45 kg
<b>Environment</b>	
Operating Temperature	-40°C ~ + 65°C
Humidity Range	0 ~ 95% (non-condensing)
Max. Operational Altitude	3000 m
Ingress Protection Rating	IP65

# One click away from 24/7 technical support

Remote Energy Monitoring and Analytics

Fault Detection and Maintenance

Grid Interaction and Net Metering

Enhanced System Lifespan

Integration with Smart Home Systems

Comprehensive Data Visualization

Detailed Configuration Settings

Collaborative Monitoring

Extended Historical Data Analysis

# KSTAR SPIRIT

At KSTAR, we understand that technical service is the cornerstone of a reliable and efficient solar solution. Our commitment to unparalleled technical support ensures that your solar investment operates at peak performance throughout its lifecycle.

**Illuminate Tomorrow:  
Technical Support Today,  
Tomorrow, Always.**

# Global Presence, Local Excellence: Our Worldwide Network

With offices strategically positioned across the globe, we seamlessly connect our innovative solar solutions with communities everywhere. Experience the assurance of a truly global partner — from the manufacturing floor to your doorstep, our commitment to excellence transcends borders.



With cutting-edge technology and a dedicated workforce, we boast a robust production capacity that ensures timely delivery without compromising quality. From concept to creation, our commitment to innovation and streamlined processes empowers us to meet the growing demands for renewable energy solutions.



PV Assembly Workshop



IGBT/MOS Welding



Aging Test



Large-machine Fully Automatic Test System



**01** Utility Project in the Ukraine 240MW PV Plant



**02** Utility Project in the Russian 300MW PV Plant



**03** Utility Project in the Spain 10MW PV Plant



**04** Utility Project in the Pakistan 900MW PV Plant



**05** Utility Project in the  
Tibet 4747m Altitude PV Plant



**06** Utility Project in the  
Zhejiang 550MW Watersurface PV Plant



**07** Utility Project in the  
Ukraine 200MW PV Plant



**08** Utility Project in the  
Ukraine 15MW PV Plant