

Shaping the new energy landscape



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Shaping the new energy landscape

Klean Utility Solution



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

1st 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.

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

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.



180+

Countries & Regions

68GW

PV Installation

30+

Years History

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



BlueWave Series

NEW

Three Phase / 1500 Vdc / 350 kW

Lower CapEx and OpEx

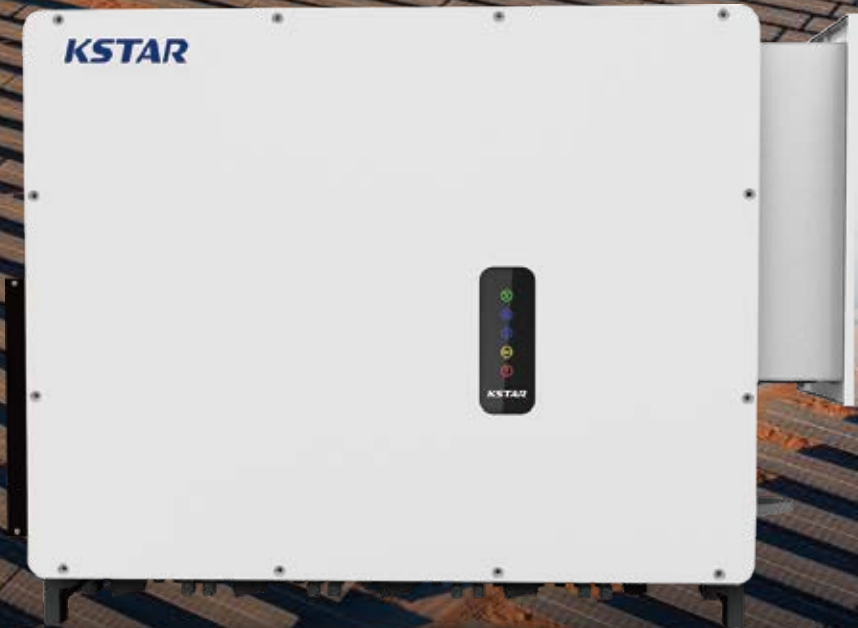
- ▶ Power Line Communication (PLC)
- ▶ Night SVG Function
- ▶ Support Both Al and Cu Cable

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
Input (DC)			
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		
Output (AC)			
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)		
Efficiency			
Max. Efficiency	99%		
Protection Devices			
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		
General Specifications			
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

 Full Power Output under 55°C
IP55 for Outdoor Use

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

 Modular Design for Easy Maintenance
Max. 18 DC Inputs

MODEL	GSM2500D		GSM3125D
Input (DC)			
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 ¹⁾	3207 A	4009 A	
Output (AC)			
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)		
Efficiency			
Max. Efficiency	99.00%		
Euro Efficiency	98.70%		
Protection			
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		
General Specifications			
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		

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

MV Power Station

Turnkey solution for large-scale PV plants

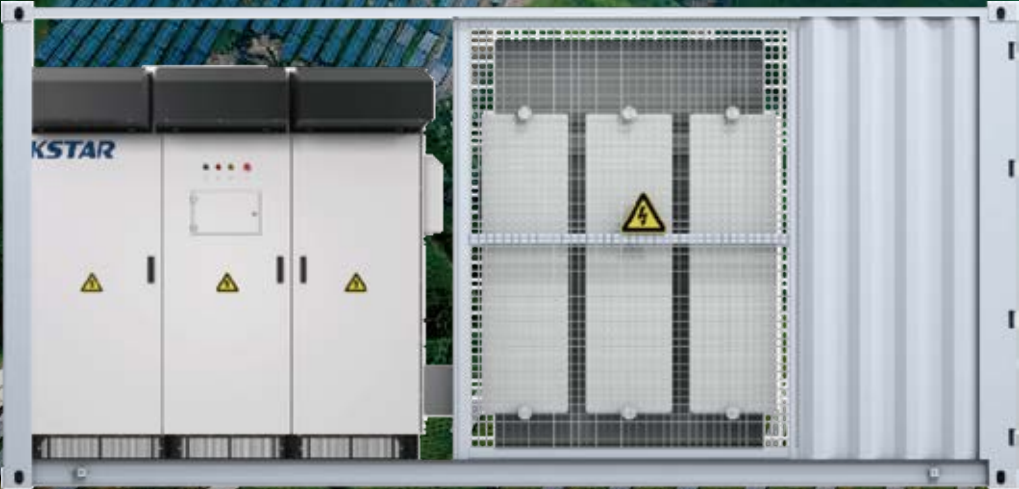
20-ft Standard Container / All-in-one / 2500–3125 kW

 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
Input (DC)			
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 ¹⁾	3207 A		4009 A
Output (AC)			
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)		
Efficiency			
Inverter Max. Efficiency	99.00%		
Inverter Euro Efficiency	98.70%		
Transformer			
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)		
Protection			
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		
General Specifications			
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

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Max. PV Voltage up to 1500 V
DC / AC Ratio up to 1.8
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Max.36 DC Inputs
IP55 for Outdoor Use

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

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

MODEL	GSM5000D-MV		GSM6250D-MV
Input (DC)			
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 ¹⁾	6414 A	8018 A	
Output (AC)			
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)		
Efficiency			
Inverter Max. Efficiency	99.00%		
Inverter Euro Efficiency	98.70%		
Transformer			
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)		
Protection			
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		
General Specifications			
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		

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KSM-SCS-04

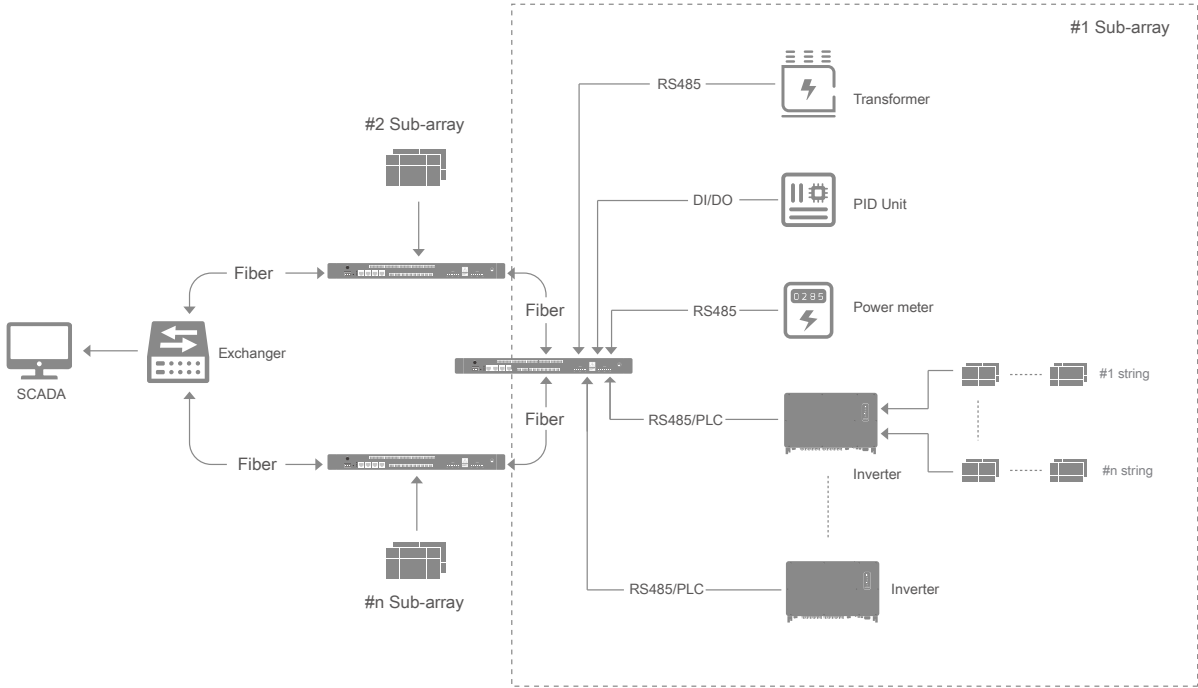
PV Communication Box

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

Maximum Transmission
Distance up to 20km

Built-in High Performance
Data Collector

MODEL	KSM-SCS-04
Configuration	
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
Technical Parameters	
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
Opeical Fiber Communication	
Central Wavelength	1310 nm
Transmission Distance	20 km
General	
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

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

IP65 Protection
Modular Design for Easy and Quick Maintenance

- 

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

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

MODEL	GSC24-MH
Input	
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
Physical	
Dimensions (W x H x D)	860 x 655 x 233 mm
Weight	45 kg
Environment	
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