Generating Superior Solutions for Energy and More.

KSTAR
Powering the Future



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℃

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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℃	
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	

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