

marvel[®] Tech

MGSI-03P3-50~60K



Efficient Higher Revenue

- 4 MPP Trackers, high single circuit tracking accuracy, fast dynamic response and higher power generation
- 160% DC Input Oversizing
- Wide MPPT voltage range: 200V-1000V
- Compatible with high power modules



Intelligent Simple O&M

- Smart I-V Curve Diagnosis Function: locate PV string faults accurately and automatically detect faults
- Intelligent Fault Detection: AC side voltage and current waveforms real-time recorded, fast fault location
- Support RS485 (WiFi/GPRS/Ethernet optional): remote monitoring and operation via PC or mobile phones



Reliable Worry Free

- IP66 Protection degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation



Technical Data

	MGSI-50K-03P3	MGSI-60K-03P3
Input (DC)		
Max. Input Power	80kW	96kW
Max. Input Voltage		1100V
Start Voltage		250V
Rated Input Voltage		600V
Full-load MPP Voltage Range		520V ~ 850V
MPPT Voltage Range		200V ~ 1000V
Number of MPP Trackers		4
Number of string per MPPT	3 / 2 / 3 / 2	3 / 3 / 3 / 3
Max. Current per MPPT	39A / 26A / 39A / 26A	39A
Max. Short Circuit Current per MPPT	48A / 32A / 48A / 32A	48A
Output (AC)		
Max. Output Current	79.7A	95.6A
Rated Output Power	50kW	60kW
Max. Output Power	55kVA	66kVA
Rated Grid Frequency		50Hz / 60Hz
Rated Grid Voltage	230Vac / 400Vac	230Vac / 400Vac
Power Factor		>0.99 (0.8 leading ~ 0.8 lagging)
THDi		<3% (Rated Power)
Efficiency		
Max. Efficiency	98.70%	98.80%
European Efficiency	98.40%	98.50%
MPPT Efficiency		99.90%
Protection		
DC Reverse Polarity Protection		Yes
Anti-islanding Protection		Yes
AC Short Circuit Protection		Yes
Residual Current Monitoring Unit		Yes
Insulation Resistance Monitoring		Yes
Ground Fault Monitoring		Yes
Grid Monitoring		Yes
PV String Monitoring		Yes
Surge Protection		Type II
AFCI Protection		Yes
Communication		
Display		LCD / LED+APP
Communication		Standard : RS485 Optional : WiFi
Standard Compliance		
Certification	IEC/EN 62109-1/2, IEC/EN 61000-6-1/3, EN50549, IEC61727/IEC62116, CEI 0-21, CEI 0-16, C10/C11, VDE 4105, VDE 0124, G99, RD244, UNE217001, UNE217002, NC RfG, NRS097-2-1, NB/T 32004, BIS	
General Data		
Dimensions (W x H x D)	650 x 450 x 260 mm	
Weight	50kg	
Operating Temperature Range	-30° C ~ +60° C	
Cooling Method	Smart Cooling	
Protection Degree	IP66	
Max. Operating Altitude	4000m	
Relative Humidity	0 ~ 100%	
Topology	Transformerless	
Night Power Consumption	<1W	