

# marvel<sup>®</sup> Tech

## MHSI-03HP3-30~60KW



### Efficient Higher Revenue

- 4 MPP Trackers, 150% DC input oversizing
- Max. PV input current 20A, compatible with high power PV modules
- Max. charge/discharge current 200A, 150% EPS peak output power



### Intelligent Simple O&M

- IP66 protection
- DC&AC Type II SPD: prevent lightning damage
- Smart I-V curve diagnosis function: locate PV string faults accurately and automatically detect faults



### Flexible Abundant Configuration

- Support optional AFCI function
- EPS switching under 10ms
- Support multi-inverters in parallel
- Standard generator interface, support for generator and smart load access



# Technical Data

	MHSI-30K-03HP3	MHSI-40K-03HP3	MHSI-50K-03HP3	MHSI-60K-03HP3
<b>Input (PV)</b>				
Max. Input Power	48000W	64000W	80000W	96000W
Max. Input Voltage			1100V	
Start-up Voltage			200V	
Rated Voltage			620V	
MPPT Voltage Range			180V-1000V	
Number of MPP Trackers			4	
Number of String per MPPT			8	
Max. Current per MPPT			4*40A	
Max. Short Circuit Current per MPPT			4*60A	
<b>Output (On-Grid)</b>				
Rated Output Power	30kW	40 kW	50 kW	60 kW
Max. Output Power	33kVA	44 kVA	55 kVA	66 kVA
Max. Output Current	50A	66.7 A	83.4 A	100 A
Max. Input Power from Grid	45kW	60 kW	75 kW	90 kW
Max. Input Current from Grid	68.4A	91 A	113.7A	136.4A
Rated Grid Voltage			3 / N / PE, 230 V / 400 Vac	
Rated Grid Frequency			50Hz / 60Hz	
THDi(@Rated Power)			<3%	
Power Factor			0.8 leading ~ 0.8 lagging	
<b>Battery</b>				
Battery Type			Lithium	
Battery Voltage Range			160V - 850V	
Max. Charge / Discharge Power	44kW		55kW	66kW
Max. Charge / Discharge Current			2*100A	
Communication			CAN / RS485 / WIFI	
<b>Output (EPS)</b>				
Rated Output Power	30kW	40kW	50kW	60kW
Max. Output Power			1.5 times / 10s	
Max. Output Current	45.6A	60.7 A	75.8 A	91 A
Switch Time			<10ms	
Rated Voltage			3 / N / PE, 230V / 400Vac	
Rated Frequency			50Hz / 60Hz	
Max. AC passthrough current			150A	
THDv (@linear load)			<2%	
<b>Output (Generator)</b>				
Max. Output Power	30kW	40kW	50kW	60kW
Max. Output Current	45.6A	60.7A	75.8A	91 A
Rated Voltage			3 / N / PE, 230V / 400Vac	
Rated Frequency			50Hz / 60Hz	
<b>Efficiency</b>				
Max. Efficiency			98.40%	
European Efficiency			97.50%	
Battery Charge / Discharge Efficiency			97.50%	
<b>Protection</b>				
Protection	DC Switch, DC Reverse Polarity Protection, Anti-islanding Protection, AC Short Circuit Protection, Residual Current Monitoring, Ground Fault Monitoring, Over Current /Voltage Protection, Battery Active Function, I-V Curve Scan			
Surge Protection			Type II	
AFCI Protection			Yes	
<b>General Data</b>				
Display			LCD / LED	
Dimension (W x H x D)			620 x 900 x 300 mm	
Operating Temperature Range			-30 ~ +60°C	
Cooling Method			Smart Cooling	
Protection Degree			IP66	
Max. Operating Altitude			4000m	
Relative Humidity			0~95%	
Self-consumption			<15W	
Topology			Transformerless	