3-8kW Hybrid Inverter

MHS-3/3.6/4.2/5/6/8K-30

97.6%	15A	30A	10ms
Max. Efficiency	PV Input Current	Charge/Discharge	UPS-level Switch

Residential | Single-Phase | HV Battery





Optimal Power & Storage

- 97.6% Max. Efficiency
- 15A PV input current per string, 1-2 MPP trackers
- 30A charge/discharge current

Strong Load & Back-up

- 110% continuous AC output overloading
- 130% max. back-up output overloading @60s
- 160% DC oversizing

Convenient Installation & Operation

- Plug & Play terminals for easy wiring
- Solinteg I-light, power and alarm indicator
- OLED display and App for setting and data management

Flexible Design & Use

- 85-450V wide battery voltage range
- IP65 for indoor and outdoor installation
- Compact size and elegant appearance

Integ M Series

The Power Master

sales@solinteg.com

This version is only for Australia.

www.solinteg.com

Model		MHS-3K-30	MHS-3.6K-30	MHS-4.2K-30	MHS-5K-30	MHS-6K-30	MHS-8K-30
PV Input							
Recommended Max. input power	[kW]	4.80	5.76	6.72	8.00	9.60	12.80
Start-up voltage	[V]	80	80	80	80	80	80
Max. DC input voltage*	[V]	600*	600*	600*	600*	600*	600*
Rated DC input voltage	[V]	360	360	360	360	360	360
Minimum operating DC voltage	[V]	100	100	100	100	100	100
MPPT voltage range*	[V]	100-550*	100-550*	100-550*	100-550*	100-550*	100-550*
No. of MPP trackers		1	1	2	2	2	2
No. of DC inputs per MPPT		1	1	1/1	1/1	1/1	1/1
Max. input current	[A]	15	15	15/15	15/15	15/15	15/15
Max. short-circuit current	[A]	20	20	20/20	20/20	20/20	20/20
Battery Side							
Battery type		Lithium Battery (with BMS)					
Battery voltage range	[V]	85-450					
Maximum charging/discharge current	[A]	30/30					
Grid Side							
Rated output power	[kW]	3.00	3.60	4.20	5.00[3)]***	6.00	8.00
Rated output apparent power	[kVA]	3.00	3.60	4.20	5.00[4)]***	6.00	8.00
Max. output apparent power	[kVA]	3.30	3.96[1)]	4.60	5.50[5)]***	6.60	8.00
Max. input apparent power**	[kVA]	6.00	7.20	8.40	10.00	10.00	12.00
Max. charging power of battery	[kW]	3.00	3.60	4.20	5.00	6.00	8.00
Rated AC voltage		L/N/PE; 220/230/240V					
Rated AC frequency	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Rated output current	[A]	13.00	15.70	18.30	21.70[6)]	26.10	36.30
Max. output current	[A]	15.00	18.00[2)]	21.00	25.00[7)]***	28.70	36.30
Power factor		0.8 leading ...0.8 lagging					
Max. total harmonic distortion		<3% @Rated output power					
DCI		<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In
Back-up Side							
Rated output power	[kW]	3.00	3.60	4.20	5.00	6.00	8.00
Rated output apparent power	[kVA]	3.00	3.60	4.20	5.00	6.00	8.00
Max. output apparent power	[kVA]	3.30	3.96	4.60	5.50	6.60	8.00
Max. output current	[A]	15.00	18.00	21.00	25.00	28.70	36.30
UPS switching time		<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
Rated output voltage		L/N/PE; 220/230/240V					
Rated output frequency	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Voltage harmonic distortion		<3% @Linear load					
Efficiency							
Max. efficiency		97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
European efficiency		97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
Protection							
DC reverse polarity protection		Integrated					
Battery input reverse connection protection		Integrated					
Insulation resistance protection		Integrated					
Surge protection		Integrated					
Over-temperature protection		Integrated					
Residual current protection		Integrated					
Islanding protection		Integrated					
AC over-voltage protection		Integrated					
Overload protection		Integrated					
AC short-circuit protection		Integrated					
Protective class		Class I					
General Data							
Over voltage category		PV: II Main: III					
Dimensions	[W×H×D mm]	534×418×210					
Weight	[KG]	27.0					
Protection degree		IP65					
Standby self-consumption	[W]	<15					
Topology		Transformerless					
Operating Temperature Range	[°C]	-30~60					
Relative Humidity	[%]	0~100					
Operating Altitude	[m]	3000 (>3000m derating)					
Cooling		Natural Convection					
Noise Level	[dB]	<25					
Display		OLED & LED					
Communication		CAN, RS485, WiFi/LAN (Optional)					
Country of manufacture		China					

* PV Max. DC Input voltage and MPPT Max. voltage is 550V without battery, or 500V with battery. The inverter will stop working when voltage between 550V (without battery) / 500V (with battery) to 600V. The inverter will cause damage when voltage higher than 600V ;

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery;

*** In some countries and areas, Max. Power of inverter "MHS-5K-30" can not exceed 5 kW or kVA via setting the "Underload" mode;

1) G98: 3.68kVA; 2) G98: 16.00A; 3) VDE-AR-N 4105: 4.6kW; 4) VDE-AR-N 4105: 4.6kVA; 5) VDE-AR-N 4105: 4.60kVA, C10/11: 5.0kVA; 6)VDE-AR-N 4105: 20.0A; 7) VDE-AR-N 4105: 21.0A, C10/11: 21.7A;

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