

Model	PHS3K-M1APHS3.6K-M1A PHS4K-M1A PHS4.6K-M1A PHS5K-M1A PHS6K-M1A PHS8K-M1A						
Series Name	PHS-M1A						
Battery Data							
Battery Type	Li-ion						
Battery Voltage Range	80V-500V						
Max. Charging/Discharging Current	50A/50A						
Rated Charging Current	50A						
Max. Charging/Discharging Power	3KW	3.6KW	4KW	4.6KW	5KW	6KW	8KW
Charging Curve for Lead-acid	3 Stages/Equalization						
External Temperature Sensor for Lead-acid	Yes						
Charging Strategy for Li-ion battery	Self-adaption to BMS						
Communications	RS485, CAN						
PV String DC Input Data							
Recommended max. PV power	4.8KW	5.8KW	6.4KW	7.4KW	8KW	9.6KW	12.8KW
Max. input voltage	600V						
Start-up voltage/Min. input DC operation voltage	40 V/30 V						
MPPT voltage range	80V~580V						
Max. input current	18A/36A						
Max. short circuit current	22A/44A						
MPPT number	2						
Strings number per MPPT	1/2						
AC Output Data(On-Grid Side)							
Rated output power	3KW	3.6KW	4KW	4.6KW	5KW	6KW	8KW
Rated /Max. apparent output power	3KVA/3KVA	3.6KVA/3.6KVA	4KVA/4KVA	4.6KVA/4.6KVA	5KVA/5KVA	6KVA/6KVA	8KVA/8KVA
Rated grid output current	13.0A	15.7A	17.4A	20A	21.7A	26.1	34.8
Max. output current	13.0A	15.7A	17.4A	20A	21.7A	26.1	34.8
Operation phase	1P						
Rated grid voltage/range (L/N/PE)	220V/230V/240V / 180 - 300 V						
Rated grid frequency	50Hz/60Hz						
Power Factor	>0.99 (0.8 leading ~ 0.8 lagging)						
THDi	<3%						
AC Output Data(Back-Up/UPS Side)							
Rated output power	3KW	3.6KW	4KW	4.6KW	5KW	6KW	8KW
Peak apparent output power	110% - 150% of rated power, 10 S						
Back-Up/UPS switch time	<10 ms						
Rated grid voltage/range (L/N/PE)	220V/230V/240V / 180 - 300 V						
Rated frequency	50Hz/60Hz						
Rated output current	13.0A	15.7A	17.4A	20A	21.7A	26.1	34.8
THDv(@linear load)	<2%						
AC Input Data(Grid Side)							
Rated grid voltage/range (L/N/PE)	220V/230V/240V / 180 - 300 V						
Rated grid input current	13.0A	15.7A	17.4A	20A	21.7A	26.1	34.8
Max. input current	13.0A	15.7A	17.4A	20A	21.7A	26.1	34.8
Operation phase	1P						
Rated grid frequency	50Hz/60Hz						
Efficiency							
Max. efficiency	98.60%						
EU efficiency	98.10%						

Protection	
Ground fault monitoring	Yes
Output over voltage protection	Yes
Anti-islanding protection	Yes
Integrated AFCI	Optional
DC reverse-polarity protection	Yes
AC short circuit protection	Yes
Leakge current protection	Yes
Surge protection	Yes
DC switch(solar)	Yes
Battery input reverse polarity protection	Yes
Protective Class	I
Over voltage category	AC ClassIII/PV ClassII
General Data	
Dimensions (W*H*D)	610*450*188 mm
Shell material	Aluminium alloy
Weight	23Kg
Operating ambient temperature range	-25~60 °C(45°C derating)
Topology	Transformerless
Ingress protecton	IP66
Cooling concept	Natural Convection
Max. operation altitude	3000 m
Grid connection standard	AS/NZS 4777.2:2020, EN50549-1:2019, G98:2021, G99:2021,NC RFG, PTPIREE, ABNT NBR 16149, ABNT NBR 16150,VDE-AR-N 4105, CEI0-21, RD1699
Safety/EMC standard	IEC-62109-1/-2, IEC-62477-1/-2, IEC-61000-6-1/-2/-3, NB/T32004
DC connection	MC4/D4
Communications	Wifi, 4G, GPRS, Bluetooth, RS485, CAN
Manufacturer	Each Energy Technology (Suzhou) Co., Ltd.
Country	China