

# PHS3K/3.6K/4K/4.6K/5K/6K/8K-M1

Single Phase HV Hybrid Inverter

**EFFICIENT - RELIABLE - POWERFUL**  
**COMPATIBILITY - TECHNOLOGY**

How to use clean solar energy to meet daily electricity needs of families and enjoy the warmth brought by solar energy even at night? This challenge will be perfectly solved by energy storage hybrid inverters of Each Energy. Our products can satisfy all needs in different situations, regardless of the types of your PV systems and with grid availability or not. We offer uninterrupted power support in any time.



**Compatibility**

lithium batteries:  
voltage range 80-500 V;  
18A per string Max. PV input current



**Flexibility**

Supports diesel generator;  
No grid places



**Efficiency**

Max. efficiency: 98.8%;  
MPPT efficiency: 99.9%



**Performance**

UPS automatic switch in < 10ms;  
Premium grid peak shaving  
capabilities



**Intelligent system**

Intelligent EMS function

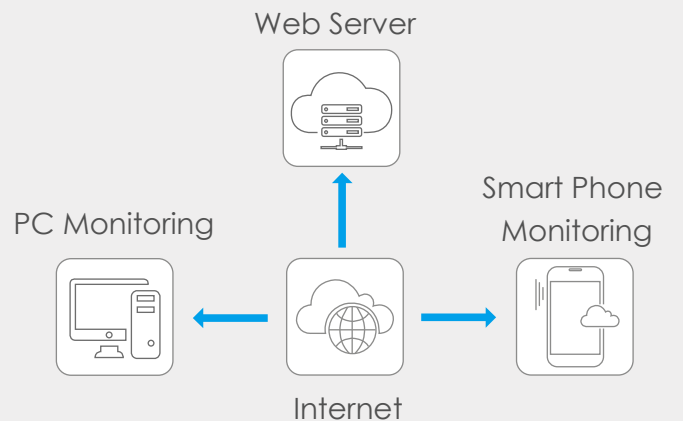


**Easy to Use**

Plug and play installation;  
Easy to monitoring



## ANYTIME ANYWHERE MONITORING



Model	PHS3K-M1	PHS3.6K-M1	PHS4K-M1	PHS4.6K-M1	PHS5K-M1	PHS6K-M1	PHS8K-M1
<b>Battery Data</b>							
Battery type	Li-ion						
Battery voltage range(V)	80~500						
Max. charging/discharging current(A)	60/60						
Rated charging current/discharging current(A)	50/50						
Charging strategy for Li-ion battery	Self-adaption to BMS						
Communications	RS485, CAN						
<b>PV String DC Input Data</b>							
Recommended max. PV power(KW)	6	7.2	8	9.2	10	12	16
Max. input voltage(V)	600						
Start-up voltage(V)/ Min. input DC operation voltage(V)	40/30						
MPPT voltage range(V)	80~580						
Max. input current(A)	18/36						
Max. short circuit current(A)	22/44						
MPPT number	2						
Strings number per MPPT	1/2						
<b>AC Output Data(On-Grid Side)</b>							
Rated output power(KW)	3	3.6	4	4.6	5	6	8
Rated/Max. apparent output power(KVA)	3/3	3.6/3.6	4/4	4.6/4.6	5/5	6/6	8/8
Rated grid output current(A)	13.0	15.7	17.4	20	21.7	26.1	34.8
Max. output current(A)	13.0	15.7	17.4	20	21.7	26.1	34.8
Operation phase	1P						
Rated grid voltage/range(V) (L/N/PE)	220/230/240(180~300)						
Rated grid frequency(Hz)	50/60						
Power Factor	>0.99, (-0.8 to +0.8 adjustable)						
THDi	< 3%						
<b>AC Output Data(Back-Up/UPS Side)</b>							
Rated output power(KW)	3	3.6	4	4.6	5	6	8
Peak apparent output power(KW), for 60S	6	7.2	8	8	8	9	9.6
Back-Up/UPS switch time(ms)	<10						
Rated output voltage/range(V) (L/N/PE)	220/230/240, 180~300						
Rated frequency(Hz)	50/60						
Rated output current(A)	13.0	15.7	17.4	20.0	21.7	26.1	34.8
THDv(@linear load)	< 2%						
<b>Efficiency</b>							
Max. efficiency	98.6%						
EU efficiency	98.1%						
<b>Protection</b>							
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						
Leakage current protection	Yes						
Surge protection	Yes						
DC switch(solar)	Yes						
Battery input reverse polarity protection	Yes						
Over voltage category	AC ClassIII/PV ClassII						
<b>General Data</b>							
Dimensions(mm) (W*H*D)	411*401*166						
Shell material	Aluminium alloy						
Weight(Kg)	15						
Operating ambient temperature range	-25~60 C						
Topology	Transformerless						
Ingress protection	IP66						
Cooling concept	Natural convection				Smart fan		
Max. operation altitude(m)	3000						
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						