

PHT4K/5K/6K/8K/10K/12K 15K/18K/20K-M1

Three 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 80-800 V;
20A per string Max. PV input current



Flexibility

Supports diesel generator;
No grid places



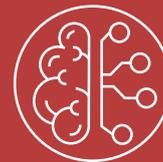
Efficiency

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



Performance

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



Intelligent system

Intelligent EMS function

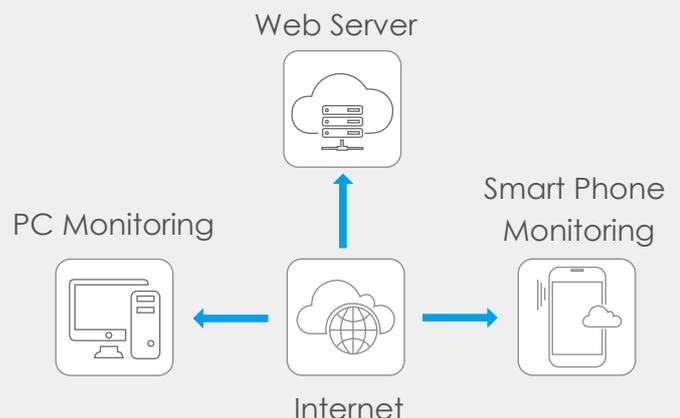


Easy to Use

Plug and play installation;
Easy to monitoring



ANYTIME ANYWHERE MONITORING



Model	PHT4K-M1	PHT5K-M1	PHT6K-M1	PHT8K-M1	PHT10K-M1	PHT12K-M1	PHT15K-M1	PHT18K-M1	PHT20K-M1
Battery Data									
Battery type	Li-ion								
Battery voltage range(V)	80~800								
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								
PV String DC Input Data									
Recommended max. PV power(KW)	8	10	12	16	20	24	30	36	40
Max. input voltage(V)	1100								
Start-up voltage(V)/ Min.input DC operation voltage(V)	50/40								
MPPT voltage range(V)	100~1000								
Max. input current(A)	20/20	20/20/20			20/20/40				
Max. short circuit current(A)	30/30	30/30/30			30/30/60				
MPPT number	2	3			3				
Strings number per MPPT	1/1	1/1/1			1/1/2				
AC Output Data(On-Grid Side)									
Rated output power(KW)	4	5	6	8	10	12	15	18	20
Rated/Max. apparent output power(KVA)	4/4	5/5	6/6	8/8	10/10	12/12	15/15	18/18	20/20
Rated grid output current(A)	5.8	7.2	8.7	11.6	14.5	17.4	21.7	26.1	29.0
Max. output current(A)	5.8	7.2	8.7	11.6	14.5	17.4	21.7	26.1	29.0
Operation phase	3P								
Rated grid voltage/range(V) (3P/N/PE)	220/380, 230/400, 240/415, 312~520								
Rated grid frequency(Hz)	50/60								
Power Factor	>0.99, (-0.8 to +0.8 adjustable)								
THDi	< 3%								
AC Output Data(Back-Up/UPS Side)									
Rated output power(KW)	4	5	6	8	10	12	15	18	20
Peak apparent output power(KW), for 60S	8	10	12	16	20	24	30	36	40
Back-Up/UPS switch time(ms)	<10								
Rated output voltage/range(V) (3P/N/PE)	220/380, 230/400, 240/415, 312~520								
Rated frequency(Hz)	50/60								
Rated output current(A)	5.8	7.2	8.7	11.6	14.5	17.4	21.7	26.1	29.0
THDv(@linear load)	< 2%								
Efficiency									
Max. efficiency	98.8%								
EU efficiency	98.3%								
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								
Leakage current protection	Yes								
Surge protection	Yes								
DC switch(solar)	Yes								
Battery input reverse polarity protection	Yes								
Over voltage category	AC ClassIII/PV ClassII								
General Data									
Dimensions(mm) (W*H*D)	507*522*194								
Shell material	Aluminium alloy								
Weight(Kg)	25								
Operating ambient temperature range	-25~60 °C								
Topology	Transformerless								
Ingress protection	IP66								
Cooling concept	Smart fan&Natural convection								
Max. operation altitude(m)	3000								
Grid connection standard	AS/NZS4777:2020, EN50549-10:2022, G98:2021, G99:2021, NC RFG, ABNT NBR 16150, VDE-AR-N 4105, CEI0-21, CEI0-16, RD1699, NA/EEA, C10:2019, PPDS:2021, Tor+R25, IEC61683, IEC61727&62161								
Safety/EMC standard	IEC-62109-1/-2, IEC-61000-6-1/-2/-3, NB/T32004								
DC connection	MC4/D4								
Communications	Wifi, 4G, GPRS, Bluetooth, RS485, CAN								