

# PHT25K/29K/30K/35K/40K/45K 50K/55K/60K-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;  
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

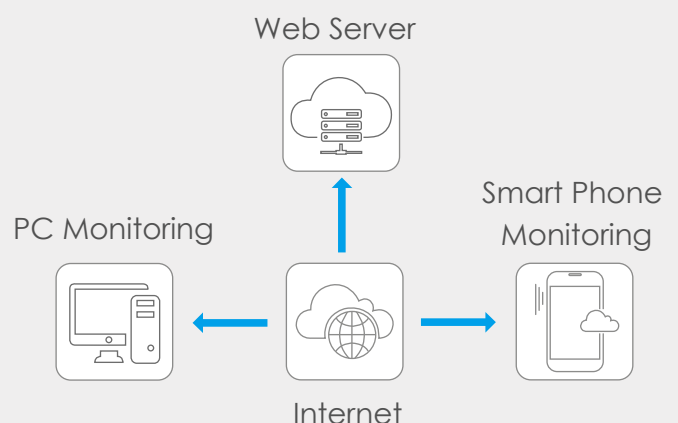


#### Easy to Use

Plug and play installation;  
Easy to monitoring



### ANYTIME ANYWHERE MONITORING



Model	PHT25K-M1	PHT29K-M1	PHT30K-M1	PHT35K-M1	PHT40K-M1	PHT45K-M1	PHT50K-M1	PHT55K-M1	PHT60K-M1
<b>Battery Data</b>									
Battery type	Li-ion								
Battery voltage range(V)	200~800								
Max. charging/discharging current(A)	60+60/60+60								
Rated charging current /discharging current(A)	50+50/50+50								
Number of battery input	2								
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)	40	46.4	48	56	64	72	80	88	96
Max. input voltage(V)	1100								
Start-up voltage(V)/ Min. input DC operation voltage(V)	50/40								
MPPT voltage range(V)	100~1080								
Max. input current(A)	40/40/40/40								
Max. short circuit current(A)	60/60/60/60								
MPPT number	4								
Strings number per MPPT	2								
<b>AC Output Data(On-Grid Side)</b>									
Rated output power(KW)	25	29	30	35	40	45	50	55	60
Rated/Max. apparent output power(KVA)	25/25	29/29	30/30	35/35	40/40	45/45	50/50	55/55	60/60
Rated grid output current(A)	36.2	42.0	43.5	50.7	58.0	65.2	72.5	79.7	87.0
Max. output current(A)	36.2	42.0	43.5	50.7	58.0	65.2	72.5	79.7	87.0
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 %								
<b>AC Output Data(Back-Up/UPS Side)</b>									
Rated output power(KW)	25	29	30	35	40	45	50	55	60
Peak apparent output power(KW), for 60S	50	50	50	50	50	50	60	60	60
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)	36.2	42.0	43.5	50.7	58.0	65.2	72.5	79.7	87.0
THDv(@linear load)	< 2%								
<b>Efficiency</b>									
Max. efficiency	98.8%								
EU efficiency	98.3%								
<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)	800*631*315.5								
Shell material	Aluminium alloy								
Weight(Kg)	55								
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/NZS4777.2:2020, 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								