

# Three Phase Hybrid Inverter



PHN5KT / PHN6KT / PHN8KT  
PHN10KT / PHN12KT / PHN15KT



98.5%  
Peak Efficiency



50%  
Max. DC Overload



Aluminum Alloy  
Die Casting



MES+FCT+CRM  
Infrastructure



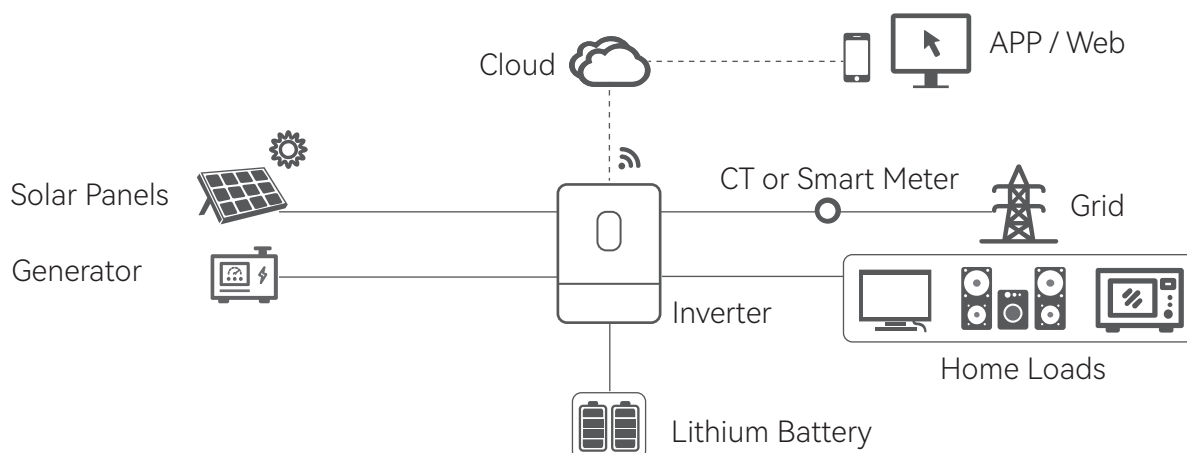
Easy to  
Install and Service



Energy  
Management

## System Diagram

# MAXHUB



# Specifications

MODEL	PHN5KT-BH2	PHN6KT-BH2	PHN8KT-BH2	PHN10KT-BH2	PHN12KT-BH2	PHN15KT-BH2
INPUT / DC						
Max. PV Power / Wp	7500	9000	12000	15000	18000	22500
Max. Input Voltage / V	1000					
MPP Voltage Range / V	150 – 850					
Min. Input Voltage / V	145					
Nominal DC Input Voltage / V	620					
Max. Input Current / A	15 / 15	15 / 15	15 / 15	15 / 15	15 / 15	30 / 15
Max. DC Short Circuit Current /A	20 / 20	20 / 20	20 / 20	20 / 20	20 / 20	40 / 20
No. of Independent MPPT Inputs	2	2	2	2	2	2
No. of PV Strings per MPPT	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
AC OUTPUT / INPUT						
Rated Power to Grid / W	5000	6000	8000	10000	12000	15000
Max. Apparent AC Power to Grid/VA	5500	6600	8800	11000	13200	16500
Max. Apparent AC Power from Grid / VA	10000	12000	15000	15000	18000	20000
Rated Grid Voltage / Vac	380 / 400					
Grid Connection	3L / N / PE					
Rated Power Frequency / Hz	50 / 60					
Max. Output Current to Grid / A	8.5	10	13.5	16	20	24
Max. AC Current from Grid / A	17	20	23	23	29	29
Power Factor	0.8 leading ~ 0.8 lagging					
THDi @ Rated Power	<3%					
AC OUTPUT (BACKUP)						
Rated Power / W	5000	6000	8000	10000	12000	12000
Peak Apparent Output Power @ 10s / VA	10000	12000	15000	15000	15000	15000
Rated Power Frequency / Hz	50 / 60					
Nominal Output Current / A	8.5	10	13.5	16	20	20
Automatic Switch Time / ms	<10					
Nominal Output Voltage / Vac	380 / 400					
Nominal Output Frequency / Hz	50 / 60					
THDv @ Linear Load	<3%					
BATTERY INPUT						
Battery Type	Lithium					
Battery Voltage Range / V	160 – 800					
Max. Charging / Discharging Current / A	25 / 25					
Charging Strategy for Lithium Battery	Self-adaption to BMS					
EFFICIENCY						
PV Max. Efficiency	98.00%	98.00%	98.20%	98.20%	98.20%	98.50%
PV Euro. Efficiency	97.30%	97.30%	97.30%	97.40%	97.40%	97.50%
PV Max. MPPTEfficiency	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%
Max. Charging Efficiency @ PV->Battery	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%
Max. Charge / Discharge Efficiency @Battery<-->Load/Grid	97.60%	97.60%	97.60%	97.60%	97.60%	97.60%
PROTECTION						
Anti-islanding Protection	Integrated					
PV Input Reverse Polarity Protection	Integrated					
Insulation Resistance Detection	Integrated					
Residual Current Monitoring	Integrated					
Output Over Current Protection	Integrated					
Output Short Circuit Protection	Integrated					
Over Voltage Protection	Integrated					
Surge Protection	DC Type II / AC Type III					
Battery Reverse Polarity Protection	Integrated					
GENERAL DATA						
Dimensions (W*H*D) / mm	425*351*200		Communication with CT / Meter		RS485	
Weight / kg	23 (PHN15KT) / 20 (for rest)		Cooling Method		Smart Cooling (PHN15KT) Natural Cooling (for rest)	
Noise Emission Typical / dBA	40		Operating Ambient Temperature / C°		-85	
User Interface	LED&LCD		Relative Humidity		0% to 100%	
DC Connection Type	MC4		Max. Operating Altitude / m		2000 (>2000 Derating)	
Battery Connection Type	SUNCLIX		Protection Class (IEC 60529)		IP65	
AC Connection Type	OT Terminal		Climatic Category (IEC 60721-3-4)		4K4H	
Communication with Cloud	RS485 / WiFi / 4G / LAN (optional)		Topology		Transformerless	
Communication with BMS	CAN/RS485		Night Consumption / W		<13	