High Frequency On Grid Solar Inverter

PH5000TM Series (4KW-15KW)



Features

- Wide input voltage range from 160V-1000Vdc
- IP65 protection degree
- Integrated DC switch
- DSP controller
- The maximum efficiency is 98.4%
- Multi MPP controller
- · WIFI monitoring standard
- Easy installation

Introduction

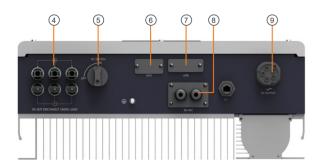
PH5000TM series PV inverters take full account of the needs of end customers, It is used to convert the DC generated by photovoltaic panels into AC and send it to the grid in a three-phase manner.with excellent performance at the same time, use LED as inverter status display, effectively improve product life.

Using DSP digital control, could afford wide grid voltage range, have a full range of protection features; to maximize the benefits at the same time, greatly enhance the reliability of the product.

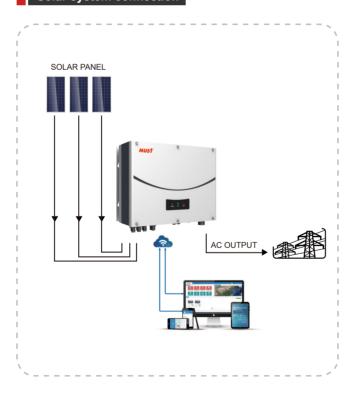
Back panel printing description



- 1. Operation normal (Green)
- 2. WIFI communication (Blue)
- 3. Error display (Red)
- 4. PV input
- 5. DC switch
- 6. WIFI connector
- 7. USB
- 8. RS485
- 9. AC output



Solar system connection



Specification --- 4-6KW

MODEL		PH50-4000TM	PH50-4000TM PH50-5000TM PH				
	Rated AC output power	4000W	5000W	6000W			
	Max.AC apparent power	4400VA	5500VA	6600VA			
	Max.output current	6.4A	8A	9.6A			
Output (AC)	Nominal AC Voltage	230V \ 400V					
	AC Voltage range	320-478V					
	AC mid for more more	50±5Hz					
	AC grid frequency range	60±5Hz					
	Power factor at Rated power	1					
	Adjustable displacement power factor	0.8leading0.8lagging					
	THDi @ Full load & THDv <1%	< 3%					
	AC grid connection type	3W+N+PE					
	Max.recommended PV power(for module STC)	4800W	6000W	7200W			
	Max.DC voltage	1000V					
	Start voltage	160V					
	Nominal voltage		600V				
Input Data	MPPT voltage range		200V-1000V				
	Max.input current	12.5A \ 12.5A					
	Number of independent MPP trackers / strings per MPP tracker	2\1					
	DC connection	H4 \ MC4					
	Max.efficiency	98.2%					
	Euro weighted efficiency	97.6%					
	MPPT efficiency		99.5%				
EFFICIENCY	Protection devices	Two DC reverse polarity protection , Output over current protection, Output overvoltage protection-varistor, DC reverse polarity protection, Integrated DC switch, Ground fault monitoring, Integrated all-pole sensitive leakage current monitoring unit					
	Dimension(W/H/D)(mm)	500*428*200					
	Weight (kg)	21					
	Operation temperature range	-25°C - +60°C with derating above 45°C					
	Noise emission(typical)	≤35dB(A)					
SENERAL DATA	Altitude	3000m					
FEATURES	Self-consumption (night)	< 1W					
	Topology	Transformerless					
	Cooling concept	Natural					
	Environmental protection Rating	lp65					
	Relative humidity	(0-100%)					
Features	AC connection	connector					
	Display	LED					
	Interfaces:USB/WI-FI/RS485/GPRS	yes/yes/opt					
	Warranty	Standard 5 years \ 10 years (opt.)					
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-7-



Specification --- 7-11KW

	MODEL	PH50-7000TM	PH50-8000TM	PH50-9000TM	PH50-10000TM	PH50-11000TM	
	Rated AC output power	7000W	8000W	9000W	10000W	11000W	
	Max.AC apparent power	7700VA	8800VA	9900VA	11000VA	12100VA	
	Max.output current	11.1A	12.7A	14.3A	15.9A	17.5A	
	Nominal AC Voltage			230V \ 400V			
	AC Voltage range	320-478V					
Output (AC)		50±5Hz					
	AC grid frequency range	60±5Hz					
	Power factor at Rated power	1					
	Adjustable displacement power factor	0.8leading0.8lagging					
	THDi @ Full load & THDv <1%	< 3%					
	AC grid connection type	3W+N+PE					
	Max.recommended PV power(for module STC)	8400W	9600W	10800W	12000W	13200W	
	Max.DC voltage	1000V					
	Start voltage	160V					
	Nominal voltage	600V					
Input Data	MPPT voltage range			200V-1000V			
	Max.input current	12.5A\ 12.5A					
	Number of independent MPP trackers / strings per MPP tracker	2\1					
	DC connection	H4 \ MC4					
	Max.efficiency	98.4%					
	Euro weighted efficiency	98%					
	MPPT efficiency			99.5%			
EFFICIENCY	Protection devices	Two DC reverse polarity protection , Output over current protection, Output overvoltage protection-varistor, DC reverse polarity protection, Integrated DC switch, Ground fault monitoring, Integrated all-pole sensitive leakage current monitoring unit					
	Dimension(W/H/D)(mm)	500*428*200					
	Weight (kg)	23.2					
	Operation temperature range	-25°C - +60°C with derating above 45°C					
	Noise emission(typical)	≤35dB(A)					
GENERAL DATA	Altitude	3000m					
FEATURES	Self-consumption (night)	< 1W					
	Topology	Transformerless					
	Cooling concept	Natural					
	Environmental protection Rating	lp65					
	Relative humidity	(0-100%)					
Features	AC connection	connector					
	Display	LED					
	Interfaces:USB/WI-FI/RS485/GPRS	yes/yes/opt					
		Standard 5 years \ 10 years (opt.)					
	Warranty		Standa	ard 5 years \ 10 years	s (opt.)		

Specification --- 12-15KW

MODEL		PH50-12000TM PH50-13000TM		PH50-15000TM			
	Rated AC output power	12000W 13000W		15000W			
	Max.AC apparent power	13200VA	14300VA	16500VA			
	Max.output current	19A	20.6A	23.8A			
	Nominal AC Voltage	230V \ 400V					
	AC Voltage range	320-478V					
Output (AC)		50±5Hz					
	AC grid frequency range	60±5Hz					
	Power factor at Rated power	1					
	Adjustable displacement power factor	0.8leading0.8lagging					
	THDi @ Full load & THDv <1%	< 3%					
	AC grid connection type	3W+N+PE					
	Max.recommended PV power(for module STC)	14400W	15600W	18000W			
	Max.DC voltage	1000V					
	Start voltage	160V					
	Nominal voltage	600V					
Input Data	MPPT voltage range	200V-1000V					
	Max.input current	21A \ 11A					
	Number of independent MPP trackers / strings per MPP tracker	2\2+1					
	DC connection	H4 \ MC4					
	Max.efficiency	98.4%					
	Euro weighted efficiency	98%					
	MPPT efficiency		99.5%				
EFFICIENCY	Protection devices	Two DC reverse polarity protection , Output over current protection, Output overvoltage protection-varistor, DC reverse polarity protection, Integrated DC switch, Ground fault monitoring, Integrated all-pole sensitive leakage current monitoring unit					
	Dimension(W/H/D)(mm)	500*428*200					
	Weight (kg)	24.8					
	Operation temperature range	-25°C - +60°C with derating above 45°C					
	Noise emission(typical)	≤35dB(A)					
GENERAL DATA	Altitude	3000m					
FEATURES	Self-consumption (night)	< 1W					
	Topology	Transformerless					
	Cooling concept	Natural					
	Environmental protection Rating	lp65					
	Relative humidity	(0-100%)					
	AC connection	connector					
Features	Display	LED					
	Interfaces:USB/WI-FI/RS485/GPRS	yes/yes/opt					
	Warranty	Standard 5 years \ 10 years (opt.)					
	Certificates and approvals	CE \ IEC62109					

- 9 -