High Frequency Off Grid Solar Inverter

PV1800 HM SERIES (2KVA-5KVA)

This is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable AC input voltage based on different applications.

Features

- Pure sine wave output
- Smart LCD setting (working modes, charge current, charge voltage, etc.)
- Built-in MPPT 60A or 80A solar charge controller
- MPPT efficiency max 98%
- New SUB working mode (solar-utility-battery working mode) for 4K-5K series
- Combining solar system, AC utility, and battery power source to supply
- continuous power

  Overload, short circuit and deep discharge protection
- Cold start function
- Support USB, RS485 monitoring function with free CD
- WIFI remote monitoring(optional)
- Parallel operation with up to 3 units (Available for 4KVA/5KVA only)
- Compatible to generator

Rated power
2KVA-5KVA

Battery Voltage
24DC/48VDC

MAX charging current
140A

Wide frequency
50HZ-60HZ

2 times surge power
based on capacity
2KVA-5KVA

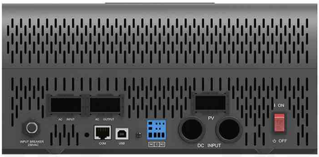
Pure sine wave

Battery smart
charge design

Multi protection

Appearance

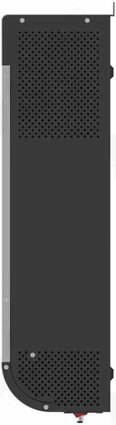
MUST®
AC/INV
CHG
FAULT

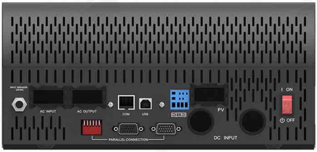

AC INPUT
AC OUTPUT
PV
INPUT BREAKER 230VAC
COM
USB
NC C NO
DC INPUT
I ON
OFF

MUST

(2KVA-3KVA)

MUST
AC/INV
CHG
FAULT



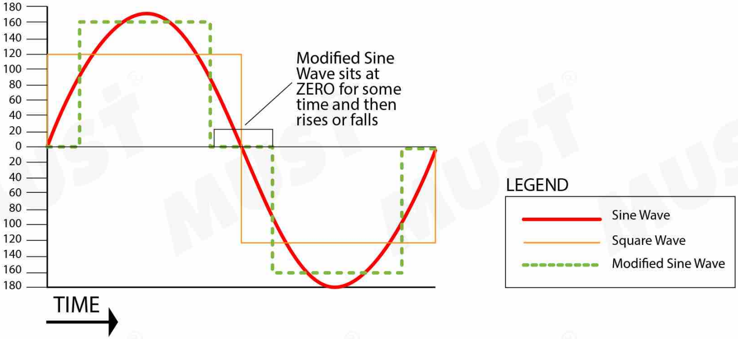

AC INPUT
AC OUTPUT
COM
USB
PV
I ON
OFF
PARALLEL CONNECTION
DC INPUT

(4KVA-5KVA)

PRODUCT FEATURES

SMART & INTELLIGENT FEATURES

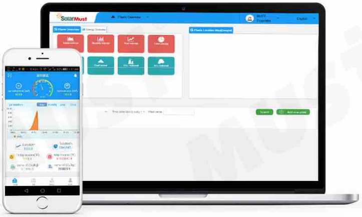
MUST



Pure Sine Wave Output

The electrical waveform output of PV1800 HM is a pure sine wave, which has the same quality as utility and/or domestic power. This type of waveform is suitable for most of electrical devices, appliances and tools. This pure sine wave unit provides more capabilities than modified sine wave inverters, because it is a cleaner form of power. The pure sine wave also effectively reduces the noise produced while using appliances.

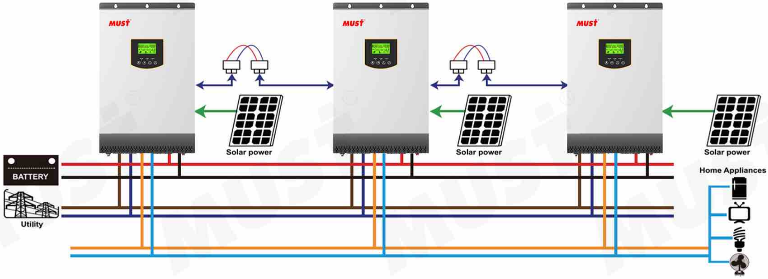
WiFi-RTU
8000-10633-00
Wi-Fi RTU
RS-232



Wifi communication

MUST

You can download this app on your cellphone and monitor the whole system, you will know how much electricity the system generate .

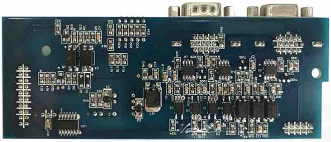

MUST
MUST
MUST
Solar power
Solar power
Solar power
BATTERY
Utility
Home Appliances

4-5KVA Parallel function

Customer can use 2pcs or 3 pcs inverters to expand the system capacity. Maximum 3pcs parallel to single phase or three phase.

Parallel kit picture as below:

A B C D
1071001807120401

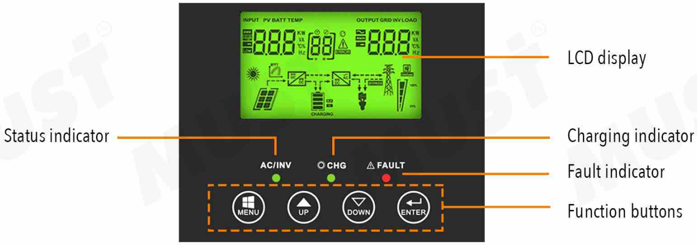


MUST

PRODUCT DETAILS

MUST HELP YOU CONTROL EVERY DETAIL

Details reflect quality


INPUT PV BATT TEMP
OUTPUT GRID INV LOAD
CHARGING
AC/INV
CHG
FAULT
MENU
UP
DOWN
ENTER

LCD display

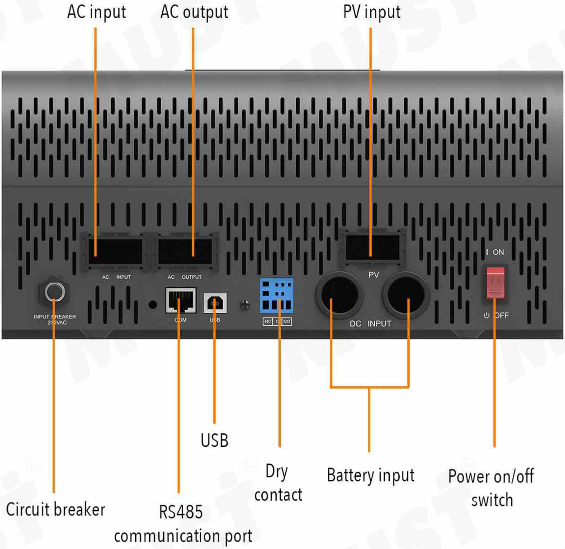
Status indicator

Charging indicator

Fault indicator

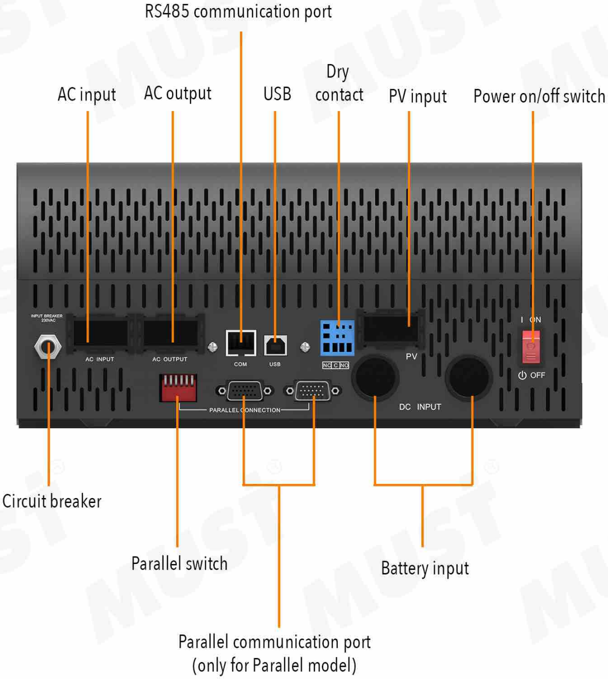
Function buttons

MUST


AC input
AC output
PV input
AC INPUT
AC OUTPUT
PV
I ON
OFF
INPUT BREAKER
230VAC
COM
USB
NC C NO
DC INPUT
USB
Dry contact
Battery input
Power on/off switch
Circuit breaker
RS485 communication port

(2KVA-3KVA)

MUST


RS485 communication port
AC input
AC output
USB
Dry contact
PV input
Power on/off switch
INPUT BREAKER 230VAC
AC INPUT
AC OUTPUT
COM
USB
NC C NO
PV
I ON
OFF
DC INPUT
PARALLEL CONNECTION
Circuit breaker
Parallel switch
Battery input
Parallel communication port
(only for Parallel model)

(4KVA-5KVA)

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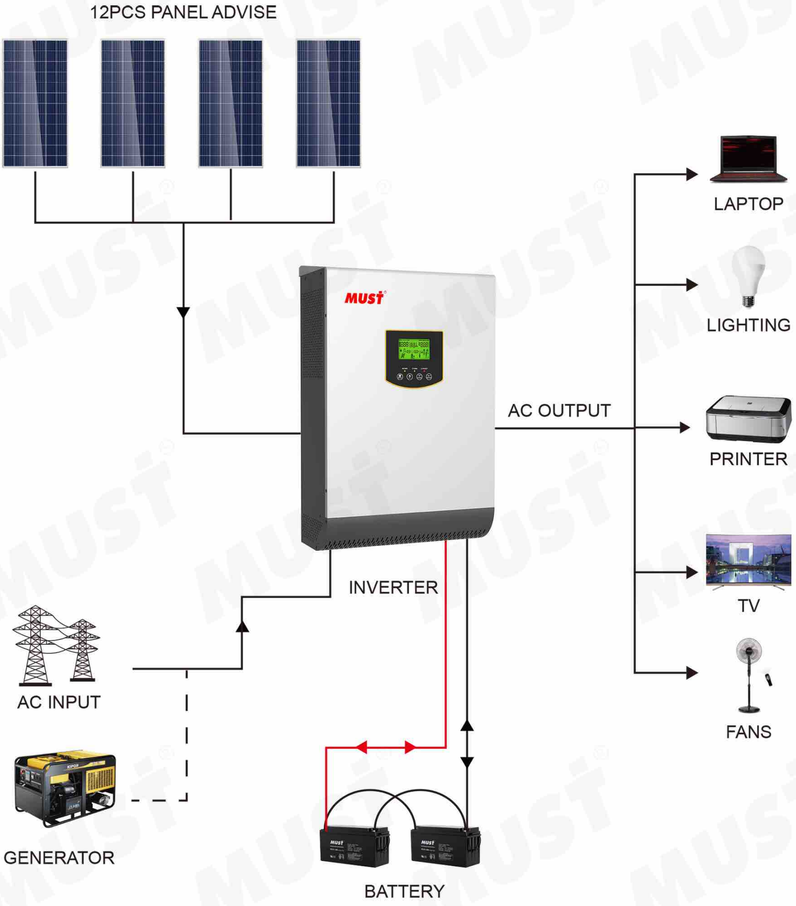
INVERTER SYSTEM CONNECTION

INVERTER + SOLAR PANELS + GRID + APPLICATION LOADS


12PCS PANEL ADVISE
MUST
AC OUTPUT
LAPTOP
LIGHTING
PRINTER
TV
FANS
INVERTER
AC INPUT
GENERATOR
BATTERY

MUST

PRODUCT PARAMETERS

MAKE SURE EACH PARAMETER IS TRUE

Learn more about the product

MODEL		PV18-2024 HM	PV18-3024HM	PV18-4048HM	PV18-5048HM
Nominal Battery System Voltage		24VDC		48VDC	
INVERTER OUTPUT	Rated Power	2000VA	3000VA	4000VA	5000VA
		1600W	2400W	3200W	4000W
	Surge Power	4000VA	6000VA	8000VA	10000VA
	Waveform	Pure Sine Wave			
	AC Voltage Regulation (Batt.Mode)	(220VAC~240VAC)±5%			
	Inverter Efficiency(Peak)	93%			
	Transfer Time	10ms (For Personal Computers) 20ms (For Home Appliance)			
AC INPUT	Voltage	230VAC			
	Selectable Voltage Range	170~280VAC(For pensonal computer) \ 90~280VAC(For Home Appliance) \ 184~253VAC(VDE4105)			
	Frequency Range	50Hz/60Hz(Auto sensing)			
BATTERY	Nomal voltage	24VDC		48VDC	
	Floating Charge Voltage	27VDC		54VDC	
	Overcharge Protection	31VDC		60VDC	
SOLAR CHARGER & AC CHARGER	Maximum PV Array Open Circuit Voltage	145VDC			
	PV Array MPPT Voltage Range	30~130VDC		64~130CDV	
	Standby Power Consumption	2W			
	PV Input Power	1500W/2000W		3000W/4000W	
	Maximum Solar Charge Current	60A/80A			
	Maximum Effciency	98%			
	Maximum AC Charge Current	60A			
	Maximum Charge Current	120A/140A			
MECHANICAL SPECIFICATIONS	Machine Dimensions(W*H*D)(mm)	272*355*100		295*528*121	
	Package Dimensions(W*H*D)(mm)	540*395*241		628*425*251	
	Net Weight(kg)	10	11	13	14
	Gross Weight(kg)	11.7	12	14	15
OTHER	Humidity	5% to 95% Relatiy Humidity (Non-condensing)			
	Operating Temperature	0°C ~55°C			
	Storage Temperature	-15°C ~60°C			

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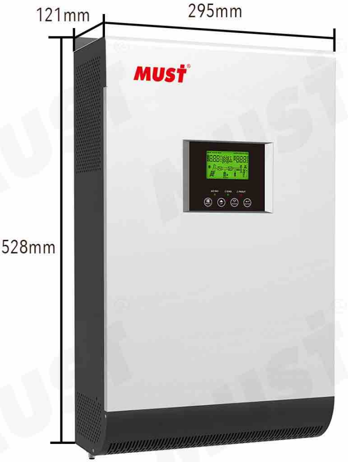
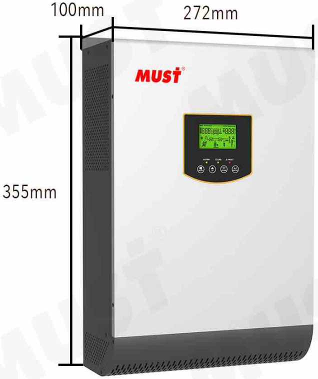
Size

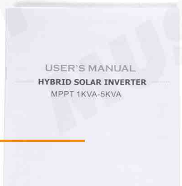

121mm
295mm
528mm
MUST

(4KVA-5KVA)


100mm
272mm
355mm
MUST

(2KVA-3KVA)

Package



USER'S MANUAL
HYBRID SOLAR INVERTER
MPPT 1KVA-5KVA

User Manual

Parallel communication cable

MUST

Monitor software comunication cable

Parallel Manual

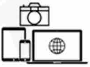
Solar power monitor software

Warranty card

Packaging

MUST

Applicable appliances

ELECTRONIC PRODUCT	APPLIANCE	ELECTRONIC PRODUCT	APPLIANCE	ELECTRONIC PRODUCT	APPLIANCE
LED LIGHT	✓	WASHING MACHINE	✓	ELECTRIC IRON	✓
INCANDESCENT LAMP	✓	HAND MILL	✓	HOT WATER BOTTLE	✓
FAN	✓	HAND DRILL	✓	DRYER	✓
DESKTOP PC	✓	IMPACT DRILL	✓	PROJECTOR	✓
LAPTOP	✓	SUBMERSIBLE PUMP	✓	AIR DUCT	✓
ELECTIRC COOKER	✓	AIR-CONDITIONING FAN	✓	PRINTER	✓
TV	✓	CRT TV	✓	VACUUM CLEANER	✓
REFRIGERATOR	✓	SOYMILK MACHINE	✓	 DIGITAL PRODUCT	✓

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PRACTICAL APPLICATION

APPLICABLE PLACE

USE IN HOME SOLAR SYSTEM

USE IN RESTAURANT POWER SYSTEMS

PROJECT REFERENCE

MUST®

SHENZHEN MUST ENERGY TECHNOLOGY CO.,LTD.