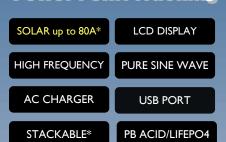
## **PIP-MS/MSX SERIES**

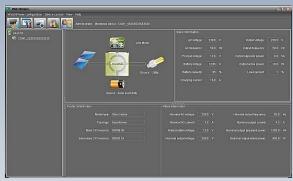
## MAXIMUM Power Point Tracking



\* Only on 48V models







MONITORING SOFTWARE — WATCHPOWER

#### **KEY FEATURES**



- Built-in MPPT solar charger up to 80A\*!
- Now available in 12Vdc model 1212MS
- 110/120V can be special ordered (1624MSX only)
- Max AC charging up to 60A (48v models only)
- Max total system charging: 60A + 80A = 140A\*!
- High frequency, light-weight design
- Programmable menu
- Adjustable Bulk/Float Voltage
- Supports various lead acid batteries

- Inverter+ AC Charger + Solar Charger 3-in-1 design
- Pure sine wave output
- 2X surge capacity up to 5 seconds
- USB communication
- LCD monitor display system info + LED indicators
- FREE monitoring software included
- Built-in generator starter dry contact\*\*
- Overload/Overtemp/short circuit protections
- Cold start capability (requires DC)

Only 48V models are PARALLEL-READY.
Optional Parallel Kit required for all units
in parallel and sold separately.



<sup>\*</sup>Applicable only to new 3248MS and 4048MS 48v models

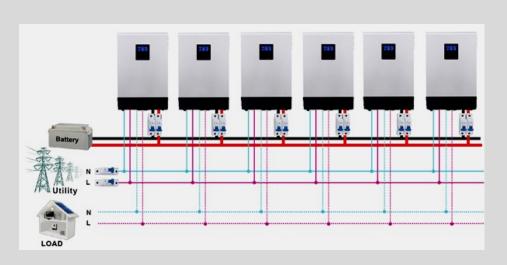
<sup>\*\*</sup> Inverter-type generators are recommended for better compatibility. Conventional type may be rejected.

# Specifications • • • •

PIP-MS/MSX Series	1212	824	1624	2424	2424MSX	3248	4048	1624MSX
ELECTRICAL SPECIFICATIONS								
Continuous Output	1.2KW	800W	1.6KW	2.4KW	2.4KW	3.2KW	4.0KW	1.6KW
Surge Rating	5 seconds max, 2X							5 seconds max 2X
Input Power Factor	0.8							0.8
Input Voltage Range	90~280VAC (Appliance mode), 170~280VAC (UPS mode)							65~140VAC, 95~140VAC
Input/Output Frequency	50Hz / 60Hz							50Hz / 60Hz
Output Voltage	230VAC±5%							110/120VAC±5%
Output Waveform	Pure Sine Wave							Pure Sine Wave
Output Regulation	< 3% RMS for battery voltage range							< 3% RMS
Peak Efficiency	93% 91% 93%						93%	
Nominal DC Voltage	12V	24V				48\	V	24V
Max DC Voltage	16V	31V					V	30V
Transfer Time (2 Modes)	<10ms (UPS mode), <20ms (Appliance mode)**							<10ms, <20ms
Charging Mode	3-stage							3-stage
Bulk Voltage (Flooded, MF)	14.6V/14.1V	//14.1V 29.2V/28.2V 58.4V					56.4V	29.2V/28.2V
Float Voltage	13.5V	27.0V				54.0	ΟV	27.0V
Max AC Charging Current	60A	10-20A 20-30A				60/	Ą	10-20A
No Load Power Consumption	<20W	<25W				<50	W	<25W
Power Saving Consumption	<10W	<10W <15W					W	<10W
Solar Charger								
Max PV Input / Output	500W	600W		1500W	4000	w	1500W	
Max Charging Current	40A	25A		60A	80A		60A	
Max PV Input Voc, MPPT Range	100V, 18~80V	75V, 30~66V		,	145V, 30~115V	145V, 60	~115V	145V, 30~115V
Algorithm	МРРТ							MPPT
ENVIRONMENTAL / MECHANICA	L SPECIFICATI	ONS						
Certification	CE							CE
Operating/Storage Temp.	0°C ~ 55°C / -15°C~ 60°C							0°C ~ 55°C / -15°C~ 60°C
Operating Humidity	5~90%RH Non-Condensing							5~90%RH Non-Condensing
Dimension	355*272*100mm 479*295*140mm 468*295*140mm						140mm	479*295*140mm
Net Weight	7.0Kg	7.0Kg	7.1Kg	7.5Kg	11.8Kg	11.5Kg	11.5Kg	11.8Kg

<sup>\*\*</sup> Transfer time may be longer (30ms) when used in parallel configuration and this may cause interruption in certain load.





## PARALLEL KIT



This accessory is applicable only to select 48VDC models of HS and MS series inverters. It is a required component to be installed in every unit of a parallel system. A parallel kit includes:

- 1 X PARALLEL BOARD
- 1 X PARALLEL COMM CABLE
- 1 X CURRENT SHARING CABLE

\*IMPORTANT: please do not wire 12v or 24v HS/MS inverters in parallel, as this will result instant damage of all units!

# REMOTE CONTROL DISPLAY MODULE



This device is an extension of the HS/MS inverter's LCD module and allows user to implement control on settings and monitoring from a distance away.

This remote module can coexist with the built-in LCD device and is compatible with most 12v/24v/48v models in the HS/MS inverter series\*. Maximum operating distance: 15m via RJ45 network cable

<sup>\*</sup>This accessory is not fully compatible with 1212HS and 1212MS. Some parameters may not show

<sup>\*\*</sup>For more details on pricing, availability and installation guide, please contact us directly.