

SHIC

High Frequency On/Off Grid Hybrid Solar Inverter



- Pure sine wave output
- On/off grid inverter with energy storage
- Multiple operations: On-Grid, Off-Grid, Grid-Tie with Battery Back-up also recognized as Grid-Interactive
- Built-in MPPT solar charge controller
- Selectable input voltage range for home appliances and personal computers
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Smart battery charger design to optimize battery performance

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 offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

Further features:

- Cold start function
- Parallel operation with up to 3 units (Available for PH18-4K/5K MPK Plus)
- Optional Remote Control Panel available

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Type:	SIHC4048-60
System voltage	48 VDC
INVERTER OUTPUT	
Rated power	5000 VA/4000 W
Surge power	10000 VA
Waveform	Pure sine wave
AC voltage regulation (Batt. Mode)	230 VAC $\pm 5\%$
Electric current	13.0 A
Output frequency precision	50 Hz $\pm 0.1\%$
THD (Linear loads)	Off-grid $\leq 2\%$
	Grid discharge $\leq 3\%$
	Grid charge $\leq 3\%$
Inverter efficiency (peak)	93%
Transfer time	10 ms (FST, APL); 20 ms (SLO)
AC INPUT	
Voltage	230 VAC
Selectable voltage range	170 ~ 280 VAC (FST); 90 ~ 280 VAC (SLO); 184-253 VAC (APL)
Frequency range	50 Hz/60 Hz (Auto sensing)
BATTERY	
Nominal voltage	48 VDC
Floating charge voltage	54 VDC
Overcharge protection	60 VDC
SOLAR CHARGER & AC CHARGER	
Maximum PV array open circuit voltage	145 VDC
PV array MPPT voltage range	64 ~ 130 VDC
Standby power consumption	2 W
Rated power	3000 W
Maximum solar charge current	60 A
Maximum efficiency	98%
Maximum AC charge current	60 A
Maximum charge current	120 A
MECHANICAL SPECS	
Dimensions	295 x 528 x 141 mm
Weight	13.5 kg
OTHER	
Humidity	5% to 95% relative humidity (non-condensing)
Operating temperature	0 °C to 55 °C
Storage temperature	-15 °C to 60 °C