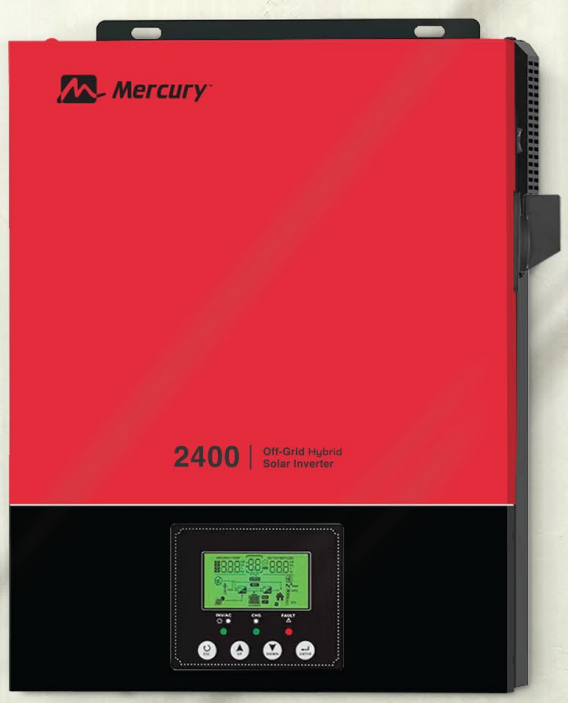
Mercury™

OFF-GRID HYBRID

SOLAR INVERTER 1500 / 2400

PF 1.0



FEATURES

- Pure sine wave inverter & ECO friendly
- Configurable input voltage range for home appliances and personal computers.
- Configurable battery charging current based on applications via LCD setting.
- Configurable AC/Solar Charger priority.
- Compatible to mains voltage or Generator power.
- Auto restart while AC is recovering & Cold start function.
- Overload/ Over temperature & Short circuit protection.
- Smart battery charger design for optimized battery performace.
- ON / OFF Bypass Switch

Mercury™

OFF-GRID HYBRID

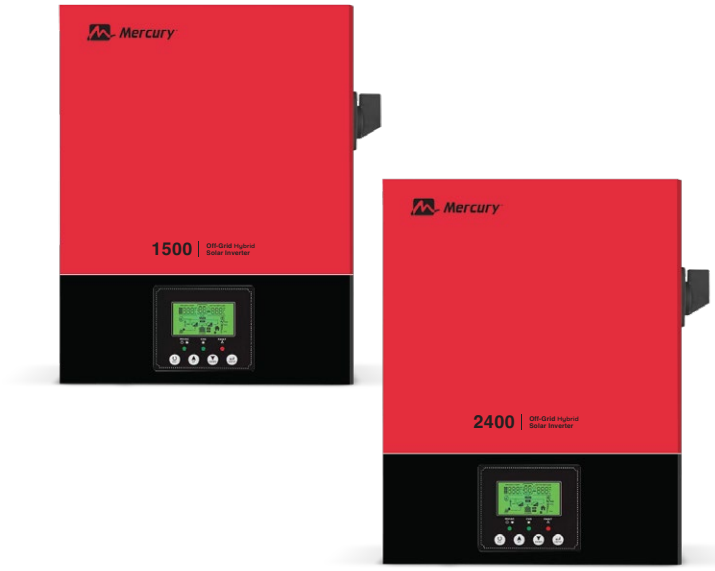
SOLAR INVERTER
1500 / 2400 PF 1.0

SPECIFICATIONS

MODEL	1500	2400
LINE MODE		
Rated Output Power	1500VA / 1500W	2400VA / 2400W
Input Voltage Waveform	Sinusoidal (utility or generator)	
Nominal Input voltage	230Vac	
Low Loss voltage	170Vac±7V (UPS); 90Vac±7V (Appliances)	
Low Loss Return voltage	180Vac±7V (UPS); 100Vac±7V (Appliances)	
High Loss Voltage	280Vac±7V	
High Loss Return Voltage	270Vac±7V	
Max AC Input Voltage	300Vac	
Nominal Input Frequency	50Hz / 60Hz (Auto detection)	
Low Loss Frequency	40±1Hz	
Low Loss Return Frequency	42±1Hz	
High Loss Frequency	65±1Hz	
High Loss Return Frequency	63±1Hz	
Output Short Circuit Protection	Circuit Breaker	
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)	
Transfer Time	10ms typical (UPS) 20ms typical (Appliances)	
INVERTER MODE		
Rated Output Power	1500W	2400W
Output Voltage Waveform	Pure Sine Wave	
Output Voltage Regulation	230Vac±5%	
Output Frequency	50Hz	
Peak Efficiency	91%	
Overload Protection	5s@ ≥150% load; 10s@ 110%-150% load	
Surge Capacity	2* rated power for 5 seconds	
Nominal DC Input Voltage	12Vdc	24Vdc
Cold Start Voltage	15.5Vdc	23Vdc
Low DC Warning Voltage	@load <50%: 11.0Vdc, @load ≥50%: 10.5Vdc	@load <50%: 22.0Vdc, @load ≥50%: 21.0Vdc
Low DC Warning Return Voltage	@load <50%: 11.5Vdc, @load ≥50%: 11.0Vdc	@load <50%: 22.5Vdc @load ≥50%: 22.0Vdc
Low DC Cut-Off Voltage	@load <50%: 10.2Vdc, @load ≥50%: 9.6Vdc	@load <50%: 20.5Vdc, @load ≥50%: 20.0Vdc
High DC Recovery Voltage	14Vdc	32Vdc
High DC Cut-off Voltage	16Vdc	33Vdc
No Load Power Consumption	<25W	<30W
CHARGE MODE - UTILITY CHARGING MODE		
Charging Algorithm	3-Step	
AC Charging Current (Max)	60Amp	60Amp
Bulk Charging Voltage	Flooded Battery: 14.6, AGM / Gel Battery: 14.1	Flooded Battery: 29.2, AGM / Gel Battery: 28.2
Floating Charging Voltage	13.5Vdc	27Vdc
CHARGE MODE - MPPT SOLAR CHARGING MODE		
Max. PV Array Power	2000W	3000W
Nominal PV Voltage	240Vdc	
PV Array MMPT Voltage Range	90~430Vdc	
Max.PV Array Open Circuit Voltage	450Vdc	
Max Charging Current (AC charger plus solar charger)	80Amp	
Dimension (D*W*H) / Net Weight	348X270X95 / 4 Kgs	348X270X95 / 5 Kgs
Safety Certification	CE	
Operating Temperature Range	-10°C~ 50° C	
Storage temperature	-15˚C~ 60˚C	
Humidity	5% to 95% Relative Humidity (Non-condensing)	

OFF-GRID HYBRID

SOLAR INVERTER
1500 / 2400 PF 1.0



Basic System Architecture

The following illustration shows basic application of this Inverter/ Charger. It also includes following devices to have a complete running system:

- Generator or Utility
- PV Modules

Consult with your system integrator for other possible system architectures depending on your requirements.

The inverter can power all kind of appliances in home or office environment, including motor-type appliances such as Tube light, Fan, Refrigerator and Air Conditioner.