



Power Solutions

## Ensuring Seamless Growth



Sine Wave Inverter

## SINE WAVE INVERTER

Sine Wave Inverters conforming to IS: 13314/1992 (reaffirmed 2003) with PWM technology for general purpose suitable for single phase AC input voltage 120V to 260 V, 50Hz and single phase AC rated output voltage 230 V, 50Hz. It shall be housed in rugged enclosure made of M.S. sheet of 1.2 mm (Min) thickness aesthetically finished, duly pretreated and powder coated.

## **TECHNICAL SPECIFICATIONS**

Item	Sine Wave Inverter
Rating	0.8 KVA, 1.0 KVA, 1.5 KVA, 2.0 KVA, 3.0 KVA, 5.0 KVA, 7.5 KVA & 10 KVA
General	Inverters shall be free from workmanship defects, sharp edges, nicks, scratches, burs, etc. All fasteners shall be fixed properly. The equipment shall be complete with all parts and all parts shall be functional.
Enclosures	Enclosures shall conform to protection requirement of IP 2L1 to IS:13947 (Part1)/1993 (reaffirmed 2004).
Switching device	MOSFET or IGBT
Switching frequency	> 50 Hz
Input	120 to 260 V, 50 Hz Single Phase AC
Output	The variation in output voltage from No load to Full load expressed as a percentages of the No load voltage shall not exceed $\pm$ 5 % over $+$ 10% and $-$ 20% variation of the rated DC input voltage. The frequency of the output voltage shall be 50 Hz $\pm$ 3%.
THD (Total Harmonic Distortion)	<5%
Efficiency	85 % (at rated output voltage and frequency)
Overload	Inverter shall withstand 10% overload for at least 10 minutes
Protections	<ul> <li>Input voltage goes outside the range 120 to 260 Volts the system shall switchover to Inverter mode.</li> <li>Over voltage, short circuit, and overload at Inverter output terminals.</li> <li>Battery reverse polarity.</li> <li>Protection against over discharge: The load shall be cut-off as soon as the voltage of battery terminal falls below: <ul> <li>10.5 V for 12 V •21 V for 24 V Battery system</li> </ul> </li> <li>The Inverter shall incorporate an arrangement for automatic changeover of load from mains supply to the inverter AC Output in case of failure of mains supply with corresponding indication as per cl: 5.6 of IS: 13314/1992(reaffirmed 2003).</li> <li>Surge Protection: provided</li> </ul>
Indicators	<ul> <li>Mains</li> <li>Presence</li> <li>Main Mode</li> <li>Battery Charging</li> <li>Inverter Mode</li> <li>Battery Low</li> </ul>
Battery Bank	Lead Acid Battery/SMF VRLA Battery/Lead Acid Tubular Battery as per relevant IS specification.

<sup>\*</sup> In the interest of continuous product improvement, all specifications are subject to change without notice.

## RS Power Systems Pvt. Ltd.