



Alpha Series Inverters (5Kva-10Kva)

- DSP Based (Digital Signal Processor)-Allows high speed and complex calculations to provide greater efficiency, battery management, circuit protection and maximisation of power.
- Pure Sine Wave Output- with a THD (Total Harmonic Distortion<3%). Allows the inverter to run sensitive equipment through the power system.
- Battery management system -Senses requirements of the battery and controls charging accordingly. Resulting in:
 - Improved efficiency- Energy Saving
 - Longer battery life-Prevents deep discharge
 - Reduced need for battery maintenance
- VRLA/ Gel/ Flooded Lead Acid compatible
- Fuzzy logic control charging
- Galvanic Isolation Transformer- provides increased protection, energy saving, robust performance-steps up PV panel or generator input when its not high enough.
- High Load Capability- The inverter prevents possible shut-down from high start-up current and surge current.
- Supports Generator use
- LCD Information Panel – for
 - Status
 - Corrective action
 - Battery/Load Level
 - Conduct Auto-self test
- Off-Grid Suitability: The inverter is designed to better suit off-grid usage:
 - Low maintenance build involving limited moving parts
 - High temperature operation capability: tested up to 50°C
- Easy to store & Manoeuvre

Technical Specification



Inverter	NPI-5KVA	NPI-7.5KVA	NPI-10KVA
Type	1 Phase in-out		
Ratings	5KVA	7.5KVA	10KVA
Output Waveform	Pure Sine Wave		
Input Parameters			
Input Supply	1 Phase,3 Wire		
Voltage Range	110-280VAC		
Frequency Range	45-55 Hz		
Power Factor (Charging)	0.85 to 0.90		
Output Parameters			
Voltage Range	220V ± 5%		
Frequency Regulation	50.0Hz±0.1Hz		
Peak Efficiency	>87%		>90%
Total Harmonic Distortion	<3%(Linear Loads)		
Crest Factor	>3:1		
Overload Handling Capacity	101%for 100 Sec, 160% for 10Sec		
Battery Parameters			
Battery Type	12V/100-200Ah	12V/100-200Ah	12V/100-200Ah
Battery Voltage	48V	120V	180V
Battery Charging Current	6A-20A±1Amp (Expandable to 30Amp)		
Environmental Parameters			
Operating Temperature	<45°C		
Acoustic Noise (at 1 mis)	<50dB		
Relative Humidity	Max 95%non condensing		
Others			
Displays & Alarms	Backlit 16x2 Lines LCD Screen - Indications,alarms & remedy		
Protection Class	IP20	IP20	IP20
Dimensions- WxHxD (mm)	350x325x580	360x615x525	350x615x525
Weight (Kgs)	50kgs	77kgs	98kgs