Model SOLINV1400
1400 VA Digital Solar Inverter

Highlights

- Micro controller based design
- Power up to 1100 W for Max 1 Hour Continuous average power 550 W
- Pure Sine wave O/p
- Recommended continuous power 550 W
- 170 to 270 Volt GRID charger @ 4A option
- 40 Amp (max) charging from solar panel Up to 1000 W solar panel can be connected
- High battery cutoff prevents overcharging
- Low Battery cut off 23 V with Grid
- Low Battery cut off 21 V without Grid
- 16 char X 2 lines alphanumeric display Displays digitally The battery voltage, the solar voltage and the inverter o/p voltage
- The BV on the LCD display is short for battery voltage, SV is for solar volts and OV is for O/P load voltage
- 24 V 100-200 AH battery recommended

- Overload trip
- Output short circuit protection
- Inverter o/p Volt regulation 230 V +/- 6%
- Auto management of Solar power, Load
- Battery low auto inverter switch off prevents battery deep discharge
- Inverter switch off will Auto transfer Load to Grid power if grid is available

This solar inverter is ideal for those who want a hassle free solar and grid power. When solar power is available the system will first run the load from solar power. If excess solar power is available it will be used to charge battery. If the load power is less than solar power available the difference power will be automatically drawn from battery. So for example at 9 am there is light load of 30 watt and solar power available is 70 watt than 30 watt solar will go into load and balance 40 watt will be stored in battery. Now suppose at 12 noon 100 watt load is switched on and solar power available is 90 W than 10 watt power will be drawn from battery so that load gets full (90+10) watt power. In the evening say after 7 pm no solar power will be available and all the power to the load will be supplied from solar energy from battery.Now if at 2 AM in the morning entire battery power is used by the inverter and battery volt goes below 11.5 volt than the inverter will be automatically switched off and the load will be shifted to grid power. Now suppose at 2 AM there is no grid power available then invertor will be on for a further period until battery is discharged below 10.5 V. So this system keeps about 20% battery power as buffer for emergency when grid power is available. Now in the morning say at 11 am the battery is charged beyond 12.9 V than the inverter will automatically be started and load will be switched to solar power.

The 16 Char by 2 line LCD display is split into 4 fields of 8 Chars each. The top left field displays battery voltage. The bottom left field displays solar voltage and bottom right field displays inverter sinewave output voltage. When Inverter is on it will regulate the inverter output voltage to 230 V AC +/- 6%against battery volt variation from 10.5 V to 15V and load variation from 10 % to 90% . Whenever there is overload condition there is an audio beep initially.If overload persists beyond 30 seconds the inverter will shut down,