# **UPSEN**

# Hybrid Pure Sine Wave Inverter Controller Rainbow Star Series 1000Va-5000Va (1ph in/1ph out)

## **Key Features**

Pure sine wave inverter High frequency full bridge design . 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 Parallel operation with up to 6 units only available for 4KVA/5KVA Auto restart while AC is recovering Overload and short circuit protection Smart battery charger design for optimized battery performance Cold start function



### Application

Supply the reliable long back up time power for the home appliances and office appliances Solar power systems etc.

#### **Technical Specification**

| <b>T</b>                                 | <b>DO</b> 4000  | <b>DQQQQ</b> | <b>DQQQQ</b> | 504000                         | DOCOOD       |
|--|---|--------------|--------------|--------------------------------|--------------|
| Technical Specification                  | RS1000  | RS2000       | RS3000       | RS4000                         | RS5000       |
| RATED POWER                              | 1000VA/800W   | 2000VA/1600W | 3000VA/2400W | 4000VA/3200W                   | 5000VA/4000W |
| INPUT                                    |   |              |              |                                |              |
| Voltage                                  | 208/220/230/240 VAC   |              |              |                                |              |
| Selectable Voltage<br>Range              | 170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances) |              |              |                                |              |
| Frequency Range                          | 50 Hz/60 Hz (Auto sensing)  |              |              |                                |              |
| OUTPUT                                   |   |              |              |                                |              |
| AC Voltage Regulation (Batt. Mode)       | 230 VAC ± 5%  |              |              |                                |              |
| Surge Power                              | 2000VA  | 4000VA       | 6000VA       | 8000VA                         | 10000VA      |
| Efficiency (Peak)                        | 90~93% 93%  |              |              |                                |              |
| Transfer Time                            | 10 ms (For Personal Computers) ; 20 ms (For Home Appliances)            |              |              |                                |              |
| Waveform                                 | Pure sine wave  |              |              |                                |              |
| BATTERY & AC Charger                     | -   |              |              |                                |              |
| Battery Voltage                          | 24VDC   |              |              | 48 VDC                         |              |
| Floating Charge Voltage                  | 27VDC   |              |              | 54 VDC                         |              |
| Overcharge Protection                    | 30VDC   |              |              | 60 VDC                         |              |
| Maximum AC Charge<br>Current             | 20A   |              |              | 25 A                           |              |
| SOLAR CHARGER                            | •   |              |              | •                              |              |
| Maximum PV Array<br>Open Circuit Voltage | 60VDC/150Vdc (Optional)   |              |              | 110VDC/150Vdc (Optional)       |              |
| Mppt Range @<br>Operating Voltage        | 25-60Vdc/25-145Vdc (Optional)   |              |              | 60-110Vdc/60-145Vdc (Optional) |              |
| Maximum Solae Charge<br>Current          | 25A   |              |              | 80A                            |              |
| Max Efficiency                           | >96%  |              |              |                                |              |
| Standby Power<br>Consumption             | 2W  |              |              |                                |              |
| PHYSICAL                                 |   |              |              |                                |              |
| Dimension, D x W x H<br>(mm)             | 350 x 130 x 340   |              |              | 380 x 130 x 465                |              |
| Net Weight (kgs)                         | 7.4   | 7.6          | 8            | 12.5                           | 13.5         |
| OPERATING ENVIRON                        | /IENT   |              |              |                                |              |
| Humidity                                 | 5% to 95% Relative Humidity(Non-condensing)                             |              |              |                                |              |
| Operating Temperature                    | 0°C - 55°C  |              |              |                                |              |
| Storage Temperature                      | -15°C - 60°C  |              |              |                                |              |

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