

# Home Inverter (H series, Pure Sine Wave output), 800 / 1.2K / 1.6K / 2.4K / 3.2K / 4K / 8KVA



## General Features:

- Adjustable voltage-transfer points & charging voltage
- Automatic restart of load after inverter shutdown
- Smart AVR function (Two buck / boost modes)
- Wide input range 140V~310V for 230V area; or 70V~155V for 115V area.
- Generator compatible & Cold-start capable
- Full function of LCD display (LED optional) with Audible alarm
- Smart battery management with big charger; Wet battery compatible.
- Intelligent double stages of charging control; Adjustable charging current by DIP for different battery.
- Thermal control cooling fan
- With DC/AC Isolation
- Support Solar panel input for charger (MPPT, Optional)



ISO 9001

| Output   |   |  |
|--|---|--|
|  | 115V Models   | 230V Models  |
| Power Levels rated at nominal inputs               | 800VA/600W : 1200VA/900W : 1600VA/1200W : 2400VA/1800W : 3200VA/2400W<br>4KVA/3KW : 8KVA/6KW (4K & 8K for 230V only)  |  |
| Output Voltage                                     | 100V/110V/115V/120V Selectable  | 200V/220V/230V/240V Selectable   |
| Voltage Waveform                                   | Pure Sine wave  |  |
| Crest Factor                                       | 3 : 1   |  |
| Output Frequency (Synchronized to Mains)           | Auto Select for 50/60Hz : 47Hz ~ 55Hz for 50Hz nominal : 56Hz ~ 65Hz for 60Hz nominal   |  |
| Regulation (Nominal)                               | ±10% typical of nominal voltage   |  |
| Regulation (Battery mode)                          | ±3% of selected output voltage (adjustable with the remote set-up software)   |  |
| Transfer time                                      | Blackout 3ms typical : Brownout 1ms typical : Battery mode to Normal mode : 1ms typical   |  |
| Over current protection                            | Over load alarm level 100% ~ 120% : Over load shutdown level 120% ~ 190%<br>(Adjustable by using the remote set-up software)  |  |
| Input  |   |  |
|  | 115V Models   | 230V Models  |
| Nominal Voltage                                    | 100V/110V/115V/120V Selectable  | 200V/220V/230V/240V Selectable   |
| Input Frequency                                    | 47Hz ~ 65Hz, 50/60Hz auto-sensing   |  |
| Efficiency (Normal mode)                           | 97%   |  |
| Noise Filtering                                    | Full time EMI/RFI filtering   |  |
| Over current protection                            | Re-settable over current protector: 800VA~3200VA  | AC Fuse: 800VA/1200VA<br>Re-settable over current protector: 1600VA~8000VA   |
| Voltage Range                                      | 70V~155V  | 140V~310V  |
| AVR Range (2 Bucks, 2 Boosts)                      | Enhanced Buck: +28% of selected nominal voltage : Buck mode: +10% of selected nominal voltage :<br>Boost mode: -10% of selected nominal voltage : Enhanced Boost: -25% of selected nominal voltage                                    |  |
| Surge Protection                                   | 800VA/1200VA: 216 Joules : 1600VA~3200VA: 324 Joules  | 800VA/1200VA: 220 Joules : 1600VA~8000VA: 440 Joules   |
| Battery  |   |  |
| Battery type                                       | Lead-Acid 50Ah~500Ah (Recommended)  |  |
| Voltage  | 800VA/1200VA: 12Vdc : 1600VA/2400VA: 24Vdc : 3200VA: 36Vdc : 4000VA/8000VA: 48Vdc   |  |
| Typical backup time                                | No Limit  |  |
| Charging method                                    | Smart pulse charging with two charging modes: Quick charging when battery is not fully charged,<br>trickle charging when battery is 90% fully charged.  |  |
| Maximum charging current                           | 800VA: 20A : 1200VA: 30A : 1600VA: 25A : 2400VA: 35A : 3200VA: 30A : 4000VA: 30A : 8000VA: 60A  |  |
| Average charging voltage for each battery          | Quick charging mode: 14V maximum : Trickle charging mode: 13.5V (adjustable with the remote set-up software)<br>Over current protection & Over charging voltage protection (SCR control) :  |  |
| Protection   | Thermal protection (CPU control) : When temperature inside the unit is over 45°C, charger will stop charging for<br>2 minutes followed by an 2 minutes charging. The cycle will be repeated until the temperature is lower than 44°C. |  |
| Monitoring   | Smart monitoring & warning for failed battery or open-circuit battery : Auto-detection each time when power on or every 6 days.   |  |
| Solar Charger (optional)                           |   |  |
| Rating voltage                                     | 12V/24V/36V/48V   |  |
| DC input range                                     | 12V model: 12~21Vdc : 24V model: 24~42Vdc : 36V model: 36~63Vdc : 48V model: 48~84Vdc   |  |
| Charging method                                    | Constant voltage with current limiting by PWM control   |  |
| Charging voltage                                   | 12V model : 13.5Vdc : 24V model : 27.0Vdc : 36V model : 40.5Vdc : 48V model : 54.0Vdc   |  |
| Power rating                                       | 12V model: 500W (13.5Vdc @ 37A) : 24V model: 1000W (27.0Vdc @ 37A) :<br>36V model: 1000W (40.5Vdc @ 25A) : 48V model: 1000W (54Vdc @ 18.5A)   |  |
| Protection   | DC input polarity protection, DC input short circuit protection( when battery is connected), DC output over current protection.   |  |
| Communications & Management                        |   |  |
| Standard Interface port                            | UPSilon2000 compatible; optional for RS232 and/or USB.  |  |
| Optional Interface port                            | RJ45 (Surge protection), DB9, SNMP (external type).   |  |
| Control panel                                      | LCD or LED Selectable   |  |
| Audible alarm                                      | Alarm on battery: Low battery & Battery over voltage : Alarm on abnormal operation: Over load, Short-circuit & Over heat.   |  |
| Green mode function<br>(Auto-shut-off in blackout) | 1% to 14% of full load (adjustable by using the remote set-up software), The default setting is OFF.  |  |
| Cooling fan control                                | Auto on/off, controlled by temperature & operation mode.  |  |
| Environmental and Safety                           |   |  |
| Operating Temperature                              | Up to 1500 meters: 0°C to 40°C (32°F to 104°F)  |  |
| Transit/storage Temp.                              | -15°C to 55°C (5°F to 131°F)  |  |
| Relative Humidity                                  | 5 - 95% non condensing  |  |
| Operating Altitude                                 | 0 ~ 3000 meters   |  |
| Quality control system                             | ISO 9001  |  |
| Physical   |   |  |
| Dimensions: (D×H×W)                                | Wall-mount type:  | Tower type:  |
| Unit / Shipping                                    | 800VA/1200VA: 12 x 25 x 37 (cm) / 22 x 31 x 47 (cm)<br>1600VA ~ 4000VA: 20 x 41 x 30 (cm) / 36 x 61 x 41 (cm)<br>8000VA: N/A  | 800VA/1200VA: 38 x 20 x 18 (cm) / 48 x 33 x 30 (cm)<br>1600VA/2400VA: 45 x 20 x 18 (cm) / 54 x 33 x 30 (cm)<br>3200VA/4000VA: 51 x 20 x 18 (cm) / 61 x 33 x 30 (cm)<br>8000VA: 56 x 42 x 24 (cm) / 60 x 52 x 28 (cm) |
| Weight:<br>Net / Gross (kg)                        | Wall-mount type:<br>800VA: 10/11 (kg) / 1200VA: 13/14 (kg)<br>1600VA: 15/16 (kg) / 2400VA: 26/28 (kg)<br>3200VA: 34/36 (kg) / 4000VA: 41/43 (kg)<br>8000VA: N/A   | Tower type:<br>800VA: 12/13 (kg) / 1200VA: 15/16 (kg)<br>1600VA: 19/21 (kg) / 2400VA: 25/27 (kg)<br>3200VA: 33/35 (kg) / 4000VA: 40/42 (kg)<br>8000VA: 80/90 (kg)  |
| Packing  | Export carton for each unit, 16 - 30 units per pallet.  |  |

\* Specifications subject to change without prior notice.

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