



## Power Ultra Long-Run S Series 1100VA~3000VA

### General Features:

- ◆ Smart backup time estimation for any kind of battery
- ◆ Adjustable voltage sensitivity
- ◆ Adjustable voltage-transfer points
- ◆ Adjustable charging voltage
- ◆ Generator compatible
- ◆ Automatic restart of load after UPS shutdown
- ◆ Smart AVR function (Two buck / boost modes)
- ◆ Cold-start capable
- ◆ Audible alarm
- ◆ Hot-swappable batteries for rack models
- ◆ Network manageable (SNMP optional)
- ◆ Full function of LCD display (LED display optional)
- ◆ Smart battery management
- ◆ Intelligent double stages of charging control, Wet battery compatible
- ◆ Thermal control cooling fan

### Output

	115V Models	230V Models
Power Levels crated at nominal inputs	1100VA, 660W 2200VA, 1350W 3000VA, 1800W	
Output Voltage	100V/110V/115V/120V Selectable	200V/220V/230V/240V Selectable
Voltage Waveform	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)	±5% typical of nominal voltage (optional at ±8% AVR for wide I/P up to ±35%)	
Regulation (Battery mode)	±3% of selected output voltage (adjustable by using 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% (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	1100VA : by AC fuse 2200VA ~ 3000VA : by re-settable over current protector	1100VA ~ 2200VA : by AC fuse 3000VA : by re-settable over current protector
Voltage Range	-20% ~ +24% for selected nominal voltage. -29% ~ +33% adjustable by using the remote set-up software	
AVR Range (2 Bucks, 2 Boosts)	Enhanced Buck: +15% of selected nominal voltage Buck mode: +5% of selected nominal voltage Boost mode: -5% of selected nominal voltage Enhanced Boost: -12.5% of selected nominal voltage	
Surge Protection	1100VA : 216 Joules 2200VA ~ 3000VA : 324 Joules	1100VA : 220 Joules 2200VA : 440 Joules 3000VA : 660 Joules

## Battery

Battery type	Lead-Acid 25Ah ~ 250Ah
Voltage	1100VA : 24Vdc (48Vdc optional) 2200VA : 48Vdc 3000VA : 72Vdc
Typical backup time	No Limit
Charging method	Smart pulse charging with two charging modes. Quick charging when battery is not fully charged, trickle charging when battery is 90% fully charged.
Average charging current	11A at normal line and normal temperature
Average charging voltage for each battery	Quick charging mode : 14V maximum. Trickle charging mode : 13.2V ~ 13.9V adjustable with the remote set-up software.

Protection	<p>Over current protection (SCR control)</p> <p>Over charging voltage protection (SCR control)</p> <p>Thermal protection (CPU control)</p> <p>When temperature inside UPS is over 45°C, charger will stop charging for 2.5 minutes followed by an 1.5 minutes charging. The cycle will be repeated until the temperature is lower than 44°C.</p>
Monitoring	<p>Smart monitoring &amp; warning for failed battery or open-circuit battery.</p> <p>Auto-detection each time when power on or every 6 days.</p>

## ☐ Communications & Management

Standard Interface port	<p>UPSilon2000 compatible.</p> <p>1100VA : RS232, optional for USB.</p> <p>2200VA ~ 3000VA : RS232 + USB.</p>
Optional Interface part	RJ45 (Surge protection), DB9, SNMP (external type)
Control panel	LCD or LED Selectable
Audible alarm	<p>Alarm on battery : Low battery &amp; Battery over voltage</p> <p>Alarm on abnormal operation : Over load, Short-circuit, &amp; Over heat</p>
EBT (Estimation of Backup Time) system	Support for LCD display
Green mode function (Auto-shutdown during blackout)	<p>1% to 14% of full load (adjustable by using the remote set-up software)</p> <p>The default setting is OFF.</p>
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 Temperature	-15°C to 55°C (5°F to 131°F)
Relative Humidity	5 - 95% non condensing
Operating Altitude	0 ~ 3000 meters
Audible noise at 1M from surface of unit	≤ 50 dBA
Safety Markings	BSMI CE
EMC	Class B, EN50091-2, FCC part15, IEC1000-2-2
Isolation	3KVac for 1 minute between battery and AC side
Quality control system	ISO 9001

## ☐ Physical

Dimensions: (DxHxW) Unit / Shipping	1100VA ~ 3000VA : 45 x 20 x 18 (cm) / 54 x 33 x 30 (cm)
Weight: Net / Gross (kg)	1100VA : 15 / 16 (kg) 2200VA : 19 / 20 (kg) 3000VA : 23 / 24 (kg)
Packing	Export carton for each unit, 16 - 30 units per pallet