

## Smart Rack Long-run Series (Rack) 2000VA~5000VA

### Output

	115V Models	230V Models
Power Levels crated at nominal inputs	2000VA, 1250W / 2700VA, 1700W 4000VA, 2500W	2000VA, 1250W / 2700VA, 1700W 4000VA, 2500W / 5000VA, 3200W
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 with the remote set-up software)	
Transfer time	Blackout 3ms; Brownout 1ms; 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	97% (Normal mode)	
Noise Filtering	Full time EMI/RFI filtering	
Over current protection	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	324 Joules	2000VA / 2700VA : 440 Joules 4000VA / 5000VA : 660 Joules

## **[-] Battery**

Battery type	Lead-Acid 25Ah ~ 250Ah
Voltage	2000VA / 2700VA : 48Vdc 4000VA / 5000VA : 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	Over current protection (SCR control) Over charging voltage protection (SCR control) Thermal protection (CPU control) : 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.
Monitoring	Smart monitoring & warning for failed battery or open-circuit battery. Auto-detection each time when power on or every 6 days

## **[-] Communications & Management**

Standard Interface port	UPSilon2000 compatible. RS232 + USB.
Optional Interface part	RJ45 (Surge protection), DB9, SNMP
Control panel	LCD
Audible alarm	Alarm on battery : Low battery & Battery over voltage Alarm on abnormal operation : Over load, Short-circuit, & Over heat
EBT (Estimation of Backup Time) system	Yes
Green mode function (Auto-shutdown during 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 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	1.5KVac for 1 minute between battery and AC side	
Quality control system	ISO 9001	

## Physical

Dimensions: (H×D×W) Unit / Shipping	2000VA ~ 4000VA : 3u x 45 (cm) / 59 x 33 x 59 (cm) 5000VA : 4u x 48 (cm) / 64 x 40 x 60 (cm)
Weight: Net / Gross (kg)	2000VA / 2700VA : 26 / 30 (kg) 4000VA : 34 / 38 (kg) 5000VA : 44 / 48 (kg)
Packing	Export carton for each unit, 16 - 30 units per pallet