

Internal Series UPS 400VA (240W)

General Features:

- Adjustable voltage-transfer points, & charging voltage.
- Audible alarm
- Automatic restart of loads after UPS shutdown.
- Cold-start capable.
- Generator compatible.
- Smart battery management.
- Support DB9 (standard), optional for RS232 & USB interface
- Intelligent double stages charging control



Output

	115V Models	230V Models
Power Levels (at nominal inputs)	280VA, 170W 400VA, 240W	
Output Voltage	100V/110V/115V/120V Selectable	200V/220V/230V/240V Selectable
Voltage Waveform	Simulated Sine wave	
Output Frequency (sync to mains)	Auto Select for 50/60Hz 45Hz ~ 55Hz for 50Hz nominal 56Hz ~ 65Hz for 60Hz nominal	
Regulation (Battery mode)	±5% of selected output voltage. (adjustable by using the setting software)	
Transfer time	6mS typical	
Over current protection	Over load alarm level 100% ~ 120%. (adjustable by using the setting software) Over load shutdown level 120% ~ 190%. (adjustable by using the setting software)	

Input

	115V Models	230V Models
Nominal Voltage	100V/110V/115V/120V Selectable	200V/220V/230V/240V Selectable
Input Frequency	45Hz ~ 65Hz, 50/60Hz auto-sensing	
Efficiency	98% (Normal mode)	
Noise Filtering	Full time EMI/RFI filtering	
Over current protection	AC fuse	

Voltage Range	-15% ~ +14% for selected nominal voltage. (Adjustable by using the setting software)	
Surge Protection	108 Joules	220 Joules

Battery

Battery type	280VA, 170W : Nickel metal hydride battery 13.2V/3500mAh 400VA, 240W : 1. Maintenance –free sealed, valve-regulated, Lead-Acid 6V/3Ah * 2 2. Nickel metal hydride battery 18V/3500mAh	
Typical backup time at half-load	Lead-Acid battery : 7 minutes	Nickel metal hydride battery : 21 minutes
Typical backup time at 80% of full load	Lead-Acid battery : 3 minutes	Nickel metal hydride battery : 11 minutes
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.	
Charging time	Lead-Acid battery : Less than 8 hours to 90% at normal line and normal temperature. Nickel metal hydride battery : 12 hours typical	
Averaged charging current	Lead-Acid battery : 0.3 A Nickel metal hydride battery : 0.6A	
Averaged charging voltage for lead-acid battery	Quick charging mode : 14V maximum. Trickle charging mode : 13.2V ~13.9V adjustable by using the setting software.	
Protection	Over current protection. Over charging voltage protection. Thermo protection. (CPU control)	
Monitoring	Smart monitoring for failed battery or battery open circuit, real time detection and warning.	

Communications & Management

Standard Interface port	RUPS and UPSilon2000 compatible; Optional for USB.	
Control panel	LED	
Audible alarm	On battery alarm: Low battery alarm, Over load alarm, Short-circuit alarm, Thermal alarm	
Green mode function (Auto-shutdown during blackout)	1% to 14% of full load (adjustable by using the setting software) The default setting is 7%(20W typical)	



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 1 M from surface of unit	≤35 dBA
Safety Markings	CE
EMC	Class B, EN50091-2, FCC part15 IEC1000-2-2
Quality control standard	ISO9001

Physical

Dimension	280VA : 210 x 144 x 40 (mm)
W×D×H (cm)	400VA : 242 x 144 x 40 (mm)
Net Weight	280VA : 2.7 / 3.0 (kgs) 400VA : 3.5 / 4.0 (kgs)
Packing	Color box for each unit, 5 pcs in one export carton, and 120~140 units per pallet.