

Internal Series UPS, SI-400 / 401 / 402 / 425 / 425U

General Features:

- Adjustable Rated voltage, Voltage-transfer points, Green mode, Low battery shut-down level, & Over load level, etc.
- Audible alarm & Cold-start available.
- Automatic restart of loads after UPS shutdown.
- Generator compatible.
- Smart battery management with thermal compensation.
- Intelligent double stages charging control
- Support DB9 (standard), optional for RS232 & USB interface
- Compatible with all major OS, including Windows, Linux, etc.



Output

	115V Models	230V Models	SI-425U
Power Levels (at nominal inputs)	SI-400 / 401 / 402 : 400VA / 240W SI-425 / 425U : 425VA / 255W		
Output Voltage	100V/110V/115V/ 120V Selectable	200V/220V/230V/ 240V Selectable	120Vac
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% Over load shutdown level 120% ~ 190%. (Both adjustable by using the setting software)		

Input

	115V Models	230V Models	SI-425U
Nominal Voltage	100V/110V/115V/ 120V	200V/220V/230V/ 240V	100V ~ 240V
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)		95Vac~260Vac
Surge Protection	108 Joules	220 Joules	

Battery

Battery type	SI-400 : Maintenance-free sealed, Lead-Acid 6V/3Ah * 2 SI-401 : Li-Polymer battery 12.8V/1600mAh x 1 pack SI-402 : Li-Polymer battery 12.8V/1600mAh x 2 packs SI-425(U) : Maintenance-free sealed, Lead-Acid 6V/9Ah * 1
Typical backup time at half-load	SI-400 : 5.5 minutes SI-401 / 425(U) : 9 minutes ; SI-402 : 18 minutes
Typical backup time at 80% of full load	SI-400 : 3 minutes ; SI-425(U) : 4 minutes SI-401 : 5 minutes ; SI-402 : 12 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 : < 8 hours to 90% at normal line and normal temperature. Li-Polymer battery : SI-401 — 6 hours typical ; SI-402 — 12 hours typical.
Average charging current	0.3 A
Average charging voltage	SI-400 : 13.6V ; SI-425(U) : 6.8V. SI-401 / 402 : 15.4V.
Protection	Over current protection. Over charging voltage protection. Thermal protection. (CPU control)
Monitoring	Smart monitoring for failed battery or battery open circuit, real time detection and warning.

Communications & Management

Interface port	Standard DB-9 (dry contact); Optional for RS-233 or 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, EN62040-2, FCC part15 IEC1000-2-2
Quality control standard	ISO9001
☐ Physical	
Dimension D×W×H (cm)	SI-400 : 242 x 144 x 40 (mm) SI-401 / 402 / 425(U) : 192 x 144 x 40 (mm)
Net Weight	SI-400 : 3.0 / 3.5 (kgs) SI-401 : 2.0 / 2.5 (kgs) ; SI-402 / 425(U) : 2.5 / 3.0 (kgs)
Packing	Color box for each unit, 6 pcs in one export carton, and around 180 units per pallet.