



# SI-900-SERIES

**TRUE ON-LINE UPS : 110VAC  
POWER : 1KVA – 10KVA**

## Ideal applications :

IT systems, telecommunications equipment and mission critical systems, ensuring maximum power reliability.



## SINGLE PHASE / SINGLE PHASE : 110VAC Output Power Factor 0.9

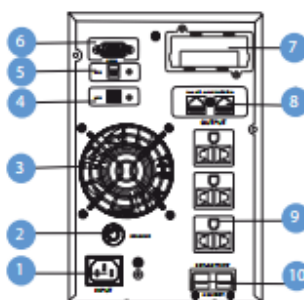
SI-900 1KVA ~ 10KVA (110V) On-line UPS is an on-line double-conversion UPS for application to voltage 100V/110V/115V/120V/127Vac. It is equipped with input power factor correction (PFC), output power factor 0.9 offering high levels of reliability and protection for IT systems, telecommunications equipment and mission critical systems, ensuring maximum power reliability.

## Features

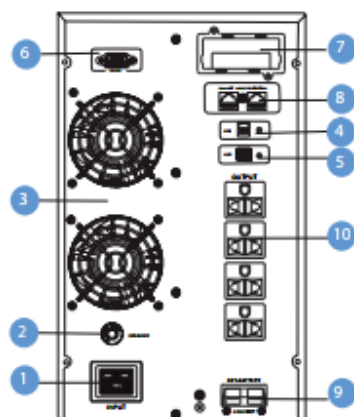
- High frequency and true double-conversion
- DSP (Digital Signal Processors) technology
- Input power factor correction (PFC)
- Wide input voltage range • Cold start (DC)
- Auto sensing frequency
- ECO mode operation for energy saving
- Selectable output voltage via LCD
- Output bypass settable via LCD
- Power-on self test
- Advanced battery management (ABM)
- Short circuit and overload protection
- Automatic charging in OFF mode
- Auto control fan speed when loads varies
- Standard RS232 communication port and RJ45 protection
- Optional USB / SNMP communication port
- Optional emergency power off (EPO)
- Optional extension battery bank

## Real Panel

1. AC Input
2. Over current Protection
3. Fan
4. UPS
5. EPO (Optional)
6. RS232
7. SNMP/AS400 (Optional)
8. Modem/Tel/Fax
9. DC Input
10. Outlet



Rear panel view 1KVA



Rear panel view 2 - 3KVA

| MODEL                             |                                   | SI901                                                                                                                    | SI902        | SI903        | SI906                                                                                                                                      | SI9010        |
|-----------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Capacity                          |                                   | 1KVA / 900W                                                                                                              | 2KVA / 1800W | 3KVA / 2700W | 6KVA / 5400W                                                                                                                               | 10KVA / 9000W |
| INPUT                             |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| Rated voltage                     |                                   | 100V / 110V / 115V / 120V / 127 Vac                                                                                      |              |              | 208V / 220 Vac                                                                                                                             |               |
| Voltage range                     |                                   | (55 ~ 145) ± 5Vac (60% load); (65 ~ 145) ±5Vac (70% load)<br>(75 ~ 145) ± 5Vac (80% load); (85 ~ 145) ± 5Vac (100% load) |              |              | Half load (115 ~ 295) ± 5Vac<br>Full load (165 ~ 295) ± 5Vac                                                                               |               |
| Frequency                         |                                   | 45 ~ 55Hz ± 0.5% or 55 ~ 65Hz ± 0.5% (auto-sense)                                                                        |              |              | 40 ~ 70Hz ± 0.5% (auto-sense)                                                                                                              |               |
| Power factor                      |                                   | ≥ 0.98                                                                                                                   |              |              | ≥ 0.99                                                                                                                                     |               |
| Bypass voltage range              |                                   | (95 ~ 135) ±5Vac                                                                                                         |              |              | 160V ~ 252Vac                                                                                                                              |               |
| OUTPUT                            |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| Voltage                           |                                   | 100V / 110V / 115V / 120V / 127 Vac (settable via LCD)                                                                   |              |              | 110V / 120 Vac: 220V / 240 Vac                                                                                                             |               |
| Voltage regulation                |                                   | ± 1%                                                                                                                     |              |              |                                                                                                                                            |               |
| Frequency                         |                                   | Synchronized with utility in mains mode;50 / 60 ± 0.2Hz in battery mode                                                  |              |              |                                                                                                                                            |               |
| Waveform                          |                                   | Sinusoidal                                                                                                               |              |              |                                                                                                                                            |               |
| Crest factor                      |                                   | 3:01                                                                                                                     |              |              |                                                                                                                                            |               |
| Harmonic distortion               |                                   | ≤ 3% (linear load);≤ 5% (non-linear load)                                                                                |              |              | ≤ 2% (linear load);≤ 5% (non-linear load)                                                                                                  |               |
| Transfer time                     |                                   | Mains mode to battery mode :0 ms<br>Inverter model to bypass mode:4 ms (typical)                                         |              |              | Mains mode to battery mode:0 ms<br>Inverter mode to bypass mode:0 ms                                                                       |               |
| Overload capability               |                                   | 105% ~ 150%:transfer to bypass in 30 s;<br><br>> 150%: transfer to bypass   in 300 ms                                    |              |              | 105% ~ 125%:transfer to bypass<br>in   3 mins;<br>125% ~ 150%: transfer to bypass<br>in   30 s;<br>> 150%: transfer to bypass in 100<br>ms |               |
| EFFICIENCY                        |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| Mains mode                        |                                   | ≥ 90%                                                                                                                    |              |              | ≥ 92%                                                                                                                                      |               |
| Battery mode                      |                                   | ≥ 87%                                                                                                                    |              |              | ≥ 91%                                                                                                                                      |               |
| ECO mode                          |                                   | ≥ 98%                                                                                                                    |              |              | ≥ 98%                                                                                                                                      |               |
| BATTERIES                         |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| DC voltage                        |                                   | 24V                                                                                                                      | 48V          | 72V          | 192V                                                                                                                                       |               |
| Inbuilt battery of standard model |                                   | 2 × 9Ah                                                                                                                  | 4 × 9Ah      | 6 × 9Ah      | 16 × 7Ah                                                                                                                                   | 16 × 9Ah      |
| Charging current                  | Standard model                    | 1A                                                                                                                       |              |              |                                                                                                                                            |               |
|                                   | Long time model                   | 6A                                                                                                                       |              |              | 1A / 3A / 5A / 8A                                                                                                                          |               |
| Typical recharge time             |                                   | 8 h                                                                                                                      |              |              |                                                                                                                                            |               |
| ALARM                             |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| Utility failure                   |                                   | Beep / 4s                                                                                                                |              |              |                                                                                                                                            |               |
| Battery low                       |                                   | Beep / 1s                                                                                                                |              |              |                                                                                                                                            |               |
| Overload                          |                                   | Beep Twice / 1s                                                                                                          |              |              |                                                                                                                                            |               |
| UPS fault                         |                                   | Long beep                                                                                                                |              |              |                                                                                                                                            |               |
| ENVIRONMENT                       |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| Humidity                          |                                   | 20 ~ 90% RH @ 0 ~ 40   (non-condensing)                                                                                  |              |              |                                                                                                                                            |               |
| Noise level                       |                                   | ≤ 50dB (1m)                                                                                                              |              |              | ≤ 55dB (1m)                                                                                                                                |               |
| COMMUNICATIONS                    |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| RS-232 (standard), USB (option)   |                                   | Supports Windows 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10                                                       |              |              |                                                                                                                                            |               |
| SNMP (option)                     |                                   | Power management from SNMP manager and web browser                                                                       |              |              |                                                                                                                                            |               |
| OTHERS                            |                                   |                                                                                                                          |              |              |                                                                                                                                            |               |
| Long time model                   | Dimensions (mm)<br>W×D×H          | 144×357×215                                                                                                              | 190×452×334  |              | 262×514×735                                                                                                                                |               |
|                                   | Packaged dimensions (mm)<br>W×D×H | 232×457×318                                                                                                              | 320×573×472  |              | 360×615×790                                                                                                                                |               |
|                                   | Net/Gross weight (kg)             | 6.0 / 7.0                                                                                                                | 12.0 / 13.3  |              | 47.0 / 49.5                                                                                                                                | 50.0 / 52.5   |
| Standard model                    | Dimensions (mm)<br>W×D×H          | 144×357×215                                                                                                              | 190×452×341  |              | 262×690×735                                                                                                                                |               |
|                                   | Packaged dimensions (mm)<br>W×D×H | 230×445×315                                                                                                              | 320×550×462  |              | 360×790×820                                                                                                                                |               |
|                                   | Net/Gross weight (kg)             | 11.0 / 13.5                                                                                                              | 20.0 / 21.5  | 24.0 / 25.5  | 87.0 / 95.0                                                                                                                                | 90.0 / 98.0   |

- All Specification subject to change without note.
- Custom-made specifications are acceptable

