SOETECK

# SY-RT Series 1-10kVA Rack Mounted UPS

## Power range

1 - 10 kVA

## Phase

Single phase grounding

## Application area

Widely applied in government, finance, communication, education, transportation, climate, broadcasting television, industry.
Various industries such as taxation, healthcare, energy and electricity.

## Performance characteristics

- Truly achieving online dual conversion
- Microprocessor control technology ensures high reliability
- Input power factor correction
- Output power factor 0.8
- Wide input voltage (110 V to 300 V)
- Efficient frequency conversion mode
- ECO mode provides energy-saving effect (limited to 1-3K models only)
- Compatible with generator input
- The charging current of the long-lasting model reaches 6A

SYRT1kVA/SYRT2kVA/SYRT3kVA

SYRT6kVA/SYRT10kVA



## Specification

| Model | | SYRT1kVA | SYRT2kVA | SYRT3kVA | SYRT6kVA | SYRT10kVA |
|---|---|---|---|---|---|---|
| Capacity | | 1000VA/800W | 2000VA/1600W | 3000VA/2400W | 6000VA/4800W | 10000VA/8000W |
| **INPUT** | | | | | | |
| Nominal voltage | | 100/110/115/120/127VAC or 200/208/220/230/240VAC | | | 208/220/230/240VAC | |
| Input voltage range | | 55-145 VAC or 110-300 VAC at 50% load<br>85-140 VAC or 160-280 VAC at 100% load | | | 110-300 VAC ± 3% at 50% load<br>176-300 VAC ± 3% at 100% load | |
| Frequency range | | 40Hz ~ 70 Hz | | | 46Hz ~ 54 Hz or 56Hz ~ 64 Hz | |
| Power factor | | ≥ 0.99 @ 100% load | | | | |
| **OUTPUT** | | | | | | |
| Rated voltage | | 100/110/115/120/127VAC or 200/208/220/230/240VAC | | | 208/220/230/240VAC | |
| Voltage range (Battery mode) | | ± 1% | | | ± 1% | |
| Frequency range (Synchronous correction range) | | 47~ 53 Hz or 57 ~ 63 Hz | | | 46Hz ~ 54 Hz or 56Hz ~ 64 Hz | |
| Frequency range (Battery mode) | | 50 Hz ± 0.25 Hz or 60Hz ± 0.3 Hz | | | 50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz | |
| Current peak ratio | | 3:1 | | | | |
| Harmonic distortion | | ≤ 3% THD (linear load); ≤ 5% THD (Nonlinear Load) | | | ≤ 3% THD (linear load); ≤ 5% THD (Nonlinear Load) | |
| Time | Switching from mains mode to battery mode | Not have | | | | |
| | Reverse to bypass | 4 milliseconds (under standard conditions) | | | 0 milliseconds | |
| Waveform (Battery mode) | | Pure sine wave | | | | |
| **EFFICIENCY** | | | | | | |
| AC mode | | 88% | 89% | 90% | 92% | 93% |
| Battery mode | | 83% | 87% | 88% | 90% | 91% |
| **BATTERY** | | | | | | |
| Standard Model | Battery type | 12 V / 9 AH | 12 V / 9 AH | 12 V / 9 AH | 12 V / 9 AH | |
| | Numbers | 2 | 4 | 6 | 16 pieces | 20 pieces / 16 pieces / 20 pieces |
| | Standard charging time | Charge to 90% in 4 hours | | | Charge to 90% in 9 hours | |
| | Maximum charging current | 1.0A (maximum) | | | Preset: 1.0 A, maximum 2.0A | |
| | Charging Voltage | 27.4VDC ± 1% | 54.7 VDC ±1% | 82.1 VDC ±1% | 218.4 VDC ± 1% / 273VDC ± 1% / 218.4 VDC ± 1% / 273VDC ± 1% | |
| Long-run Model | Battery type | Match multiple battery boxes according to actual applications | | | | |
| | Numbers | 2 / 3 / 4 / 6 / 6 / 8 | | | 16~20 (adjustable) | |
| | Standard charging time | 1.0A/2.0A/4.0A/6.0 A | | | 1A/2A/4A/6A<br>(adjustable, 6A is only suitable for 16 batteries) | |
| | Maximum charging current | 27.4VDC ± 1% / 41.0VDC ± 1% / 54.7 VDC ±1% / 82.1 VDC ±1% / 82.1 VDC ±1% / 109.4VDC ±1% | | | 218.4 VDC ± 1% （Based on 16 pcs batteries） | |
| **INDICATORS** | | | | | | |
| LCD or LED display | | Load size, battery capacity, mains mode, battery mode, bypass mode, fault indication | | | | |
| **ALARM** | | | | | | |
| Battery mode | | Sound every 4 seconds | | | | |
| Low battery | | Sound once every second | | | | |
| Overload | | Sound once every second | | | | |
| Fault | | Continuous ringing | | | | |
| **PHYSICAL** | | | | | | |
| Standard machine | D * W * H (mm) | 310 x 438 x 88 [2U] | 410 x 438 x 88 [2U] | 630 x 438 x 88 [2U] | Host: 530x438x88 [2U] Battery kit: 668x438x88 [2U] / Host: 530x438x88 [2U] Battery kit: 580x438x133 [2U] | Host: 580x438x133 [3U] Battery kit: 580x438x133 [3U] |
| | Net weight (kg) | 12 | 19 | 29.3 | Host: 15 Battery kit: 48 / Host: 15 Battery kit: 61 | Host: 18 Battery kit: 51 / Host: 18 Battery kit: 61 |
| Long lasting machine | D * W * H (mm) | 310 x 438 x 88 [2U] | 410 x 438 x 88 [2U] | | 500 x 438 x 88 [2U] | 580 x 438 x133 [3U] |
| | Net weight (kg) | 9 | 12 | 14.2 | 15 | 18 |
| **ENVIRONMENT** | | | | | | |
| Temperature and humidity | | Relative humidity 20-90% and temperature 0-40 ° C (non condensing) | | | Relative humidity 0-95% and temperature 0-40 ° C (non condensing) | |
| Noise | | Less than 50dBA @ 1 meter | | | Less than 55dBA @ 1 meter | Less than 58dBA @ 1 meter |
| **MANAGEMENT** | | | | | | |
| Intelligent RS-232/optional USB | | Supports Windows ® 2000/2003/XP/Vista/2008, Windows ® 7/8, Linux, Unix, and MAC | | | | |
| Optional SNMP | | Power management supports SNMP management and network management | | | | |

*When the UPS is set to constant voltage and frequency mode, the output power will be reduced by 40%. When the output voltage of the UPS is set to 208VAC, the output power will be reduced by 10%.
**When the number of internal batteries is changed to 16-19, the machine will reduce the output according to the following formula: P=Prating X (N/20 x 100%).
***If the machine is installed at an altitude exceeding 1000 meters, the output power will decrease by 1% for every 100 meters increase.