

Guardian R/T



Guardian R/T 1K(L) / 1.5K(L) / 2K(L) / 3K(L)

• True double-conversion online UPS

A true double conversion UPS will provide clean, high level quality power to fully protect mission-critical devices such as sensitive networks, small computer centers servers, telecom applications, as well as for industrial applications.

• Output power factor 0.9

Guardian R/T is a high-density UPS with an output power factor of 0.9 to provide higher performance and efficiency to critical applications.

• User-friendly and easy-shift LCD display

The front panel digital display can be easily shifted through LCD setting to suit the installation format: Vertical stand (Tower style) or Horizontal (for Rack mount style).



• Rack/Tower design

Guardian R/T series is designed in a true universal-mount case. Its ingenious design allows it to be easily installed either as a 19" rackmount bracket or as a floor-standing tower.

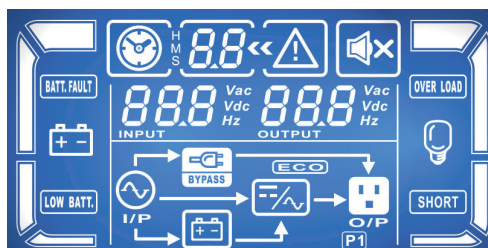


19" rack-mounting



Floor-standing Tower

LCD Display Panel



• Programmable power management outlets

With programmable power management outlets, users can easily and independently control load segments. During power failure, this feature enables users to extend battery time to mission-critical devices by shutting down the non-critical devices.



Programmable Outlets (P1)
- connect to non-critical devices

• 50/60 Hz frequency converter mode

Lock output frequency at 50Hz or 60Hz to suit power sensitive equipments.

• ECO and advanced ECO mode for energy saving

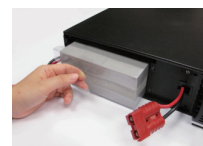
Allows the UPS to operate with up to 97% efficiency while in energy-saving ECO mode. In this operation mode, load is supplied by the mains. In the event of a mains failure, the inverter takes over the load and provides supply continuity to the connected systems. Guardian R/T 1-3K even offers advanced ECO mode to allow UPS to operate at a higher efficiency level of up to 98%.

• Emergency Power Off Function (EPO)

Thanks to its EPO feature, Guardian R/T series can secure personnel and equipment in case of fires or other emergencies.

• Hot-swappable battery design for 1-3K models only

This design ensures clean and uninterruptible power to protected equipment during battery replacement.



• DSP technology applied for 6K and up models

Its advanced DSP controller provides an improved and cost-effective solution that offers sky-high performance.

• Active input power factor correction 0.99 for 6K and up models

Helps you save more energy with a more stable power factor performance that also meets higher environmental standards.

Guardian R/T Battery Pack



| Capacity | 1K | 1.5K | 2K | 3K | 6K | 10K |
|-------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| Battery Type | 12 V / 9 Ah | 12 V / 9 Ah | 12 V / 9 Ah | 12 V 9 Ah | 12/7Ah | 12 V 9 Ah |
| Battery Number | 8 pcs | 6 pcs | 8 pcs | 12 pcs | 20 pcs | 20 pcs |
| Dimension (DxWxH) | 480 x 438 x 88 | 480 x 438 x 88 | 480 x 438 x 88 | 600 x 438 x 88 | 580 x 438 x 133 | 580 x 438 x 133 |
| Net Weight (kgs) | 31.1 | 29.1 | 31.1 | 43.3 | 57 | 63 |



1K/1.5K/2K/3K Battery Pack

Guardian 1KVA/1.5KVA/2KVA/3KVA Rack/Tower (R/T) On-line UPS Selection Guide

| MODEL | | Guardian R/T 1K | Guardian R/T 1KL | Guardian R/T 1.5K | Guardian R/T 1.5KL | Guardian R/T 2K | Guardian R/T 2KL | Guardian R/T 3K | Guardian R/T 3KL |
|--------------------------------------|---------------------------|--|---|---------------------------------|---|---------------------------------|---|---------------------------------|---|
| PHASE | | Single phase with ground | | | | | | | |
| CAPACITY | VA | 1000 VA | | 1500 VA | | 2000 VA | | 3000 VA | |
| | W | 900 W | 800 W | 1350 W | 1200 W | 1800 W | 1500 W | 2700 W | 2400 W |
| INPUT | | | | | | | | | |
| Voltage Range | Low Line Transfer | 80 VAC / 70 VAC / 60 VAC / 55 VAC ± 5 % (based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0) | | | | | | | |
| | Low Line Comeback | 85 VAC / 75 VAC / 65 VAC / 60 VAC ± 5 % (based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0) | | | | | | | |
| | High Line Transfer | 150 VAC ± 5 % | | | | | | | |
| | High Line Comeback | 140 VAC ± 5 % | | | | | | | |
| Frequency Range | | 40Hz ~ 70Hz | | | | | | | |
| Power Factor | | ≥ 0.99 @ Nominal Voltage (100% load) | | | | | | | |
| OUTPUT | | | | | | | | | |
| Output Voltage | | 110/115/120/127 VAC | | | | | | | |
| AC Voltage Regulation (Batt. Mode) | | ± 1% | | | | | | | |
| Frequency Range (Synchronized Range) | | 47 ~ 53 Hz | | | | | | | |
| Frequency Range (Batt. Mode) | | 50 Hz ± 0.2 Hz | | | | | | | |
| Current Crest Ratio | | 5:1 (max.) | | | | | | | |
| Harmonic Distortion | | ≤2 % THD (Linear Load) ; ≤8 % THD (Non-linear Load) | | | | | | | |
| Transfer Time | Line mode to Battery mode | Zero | | | | | | | |
| | Inverter to Bypass | 4 ms (Typical) | | | | | | | |
| Waveform (Batt. Mode) | | Pure Sinewave | | | | | | | |
| EFFICIENCY | | | | | | | | | |
| AC Mode | | 86% | | | | 88% | | | |
| Battery Mode | | 83% | | | | 85% | | | |
| BATTERY | | | | | | | | | |
| Battery Type | | 12 V / 9 AH | Depending on the capacity of external batteries | 12 V / 9 AH | Depending on the capacity of external batteries | 12 V / 9 AH | Depending on the capacity of external batteries | 12 V / 9 AH | Depending on the capacity of external batteries |
| Numbers | | 2 | | 3 | | 4 | | 6 | |
| Typical Recharge Time | | 4 hours recover to 90% capacity | | 4 hours recover to 90% capacity | | 4 hours recover to 90% capacity | | 4 hours recover to 90% capacity | |
| Charging Current (max.) | | 1.0 A | 4A or 8A | 1.0 A | 4A or 8A | 1.0 A | 4A or 8A | 1.0 A | 4A or 8A |
| Charging Voltage | | 27.4 VDC ± 1% | | 41.1 VDC ± 1% | | 54.7 VDC ±1% | | 82.1 VDC ±1% | |
| INDICATORS | | | | | | | | | |
| LCD Display | | Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator | | | | | | | |
| ALARM | | | | | | | | | |
| Battery Mode | | Sounding every 4 seconds | | | | | | | |
| Low Battery | | Sounding every second | | | | | | | |
| Overload | | Sounding twice every second | | | | | | | |
| Fault | | Continuously sounding | | | | | | | |
| PHYSICAL | | | | | | | | | |
| Dimension, D x W x H (mm) | | 380 x 438 x 88 [2U] | | 480 x 438 x 88 [2U] | | 480 x 438 x 88 [2U] | | 600 x 438 x 88 [2U] | |
| Net Weight (kgs) | | 12.9 | 8.6 | 17.6 | 10.7 | 20.6 | 11.3 | 28 | 13.8 |
| ENVIRONMENT | | | | | | | | | |
| Humidity | | 20-90 % RH @ 0- 40°C (non-condensing) | | | | | | | |
| Noise Level | | Less than 50dBA @ 1 Meter | | | | | | | |
| MANAGEMENT | | | | | | | | | |
| Smart RS-232 / USB | | Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC | | | | | | | |
| Optional SNMP | | Power management from SNMP manager and web browser | | | | | | | |

Product specifications are subject to change without further notice