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SME Use  
Telecommunications  
Data Centre



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## Riello Multi Sentry 20kVA 3/3 Phase (5mins)

**Part No.** MST20-T1

### Product Description

**Please Note: This UPS will supply 5 minutes runtime at a full load of 18kW & is configured as 3/3 Phase UPS.**

The Riello Multi Sentry is a state-of-the-art uninterruptible power supply, achieving the highest possible level of on-line double-conversion performance (VFI-SS-111) as defined within IEC EN 62040-3.

The UPS has been designed to protect critical information and telecommunications systems, networks, services and processes whose operation could be disrupted by poor power quality and/or breaks in their mains power supply.

The Multi Sentry UPS is one of the most efficient UPS available with a minimal impact on its environment and power sources.

#### **ZERO IMPACT SOURCE**

MULTI SENTRY UPS are easy to install, especially on sites where there is limited power capacity available, a standby generator and potentially harmonic compatibility issues:

- Low input current distortion - less than 3%
- High input power factor 0.99
- Power walk-in function to achieve progressive rectifier start-up
- Delayed start-up on mains power supply return

MULTI SENTRY also performs the role of a high specification filter, protecting its power supply sources (mains or generator) from any harmonics and reactive power generated by the loads it is powering.

Extended 3 Year Manufacturers Warranty Free of Charge with All Riello UPS.

## Features

### BATTERY CARE SYSTEM

- The MULTI SENTRY Battery Care System optimises battery performance, to help extend their working life and ensure that the UPS can deliver its full-rated back-up time when called upon in an emergency.
- Battery recharge: MULTI SENTRY is designed to work with VRLA AGM and GEL lead-acid batteries including open-vented types, in addition to Ni-Cads. Specific management features include:
  - One-level recharge to meet the requirements of the most common VRLA AGM batteries
  - Two voltage level recharge meeting the IU characteristic
  - Restricted charging to reduce electrolyte consumption and extend the life of VRLA batteries
- Temperature compensation: to avoid excessive voltage being applied to the batteries in a high ambient
- Battery test: to detect performance degradation and predict battery failure.
- Deep discharge protection: to prevent the batteries being discharged below a level from which they cannot be recovered (especially when discharged over long periods with very low loads).
- Low AC ripple current: from a high-frequency battery charger, to ensure the batteries are not subjected to this damaging element commonly experienced with some other UPS and power supply designs.
- Wide input voltage range: from a rectifier that can work down to less than 40% of its nominal supply rating (at half load), removing the need to discharge the batteries.

### FLEXIBILITY

- MULTI SENTRY can be used for a wide range of applications, thanks to its configuration options, flexibility, accessories and performance levels:
  - Suitable for powering capacitive loads, for example Blade servers - without any reduction in active power, from 0.9 leading to 0.9 lagging
  - Modes of operation include: On-Line, Eco, Smart-Active and Stand-By/Off
  - Frequency conversion mode
  - Power Share connections for priority-based load shedding when the mains power supply has failed
  - Cold-start facility to switch the UPS on even without a mains power supply present
  - Extensive back-up time options using battery extension cabinets
  - Optional battery cabinet temperature sensor to assist the temperature compensating charger
  - Optional battery chargers to optimize recharge times
  - Optional dual input supplies
  - Optional isolation transformers for Galvanic isolation and neutral connectivity

### ADVANCED COMMUNICATION

- MULTI SENTRY has a large front panel graphic display providing information including: real-time measurements, operating status and

- alarms conditions - in eight different languages
- Advanced multiplatform communication, for all operating systems and network environments: PowerShield<sup>3</sup> monitoring and shutdown software included with SNMP agent
- Compatible with TeleNetGuard for the remote assistance service
- RS232 or USB serial port
- Three communication slots for accessories including: network adapters and volt-free contacts
- REPO (Remote Emergency Power Off) to shut down the UPS remotely in an emergency
- Input for connection of an auxiliary contact for an external manual bypass
- Input for synchronisation with an external power source
- Graphic mimic panel display for remote connection.

#### LOW MANAGEMENT COST

- The MULTI SENTRY design provides exceptional performance and efficiency levels, within a very compact footprint and overall case design:
  - Lowest footprint in its category - 0.26m<sup>2</sup> for the 20kVA MULTI SENTRY with internal batteries.
  - High efficiency up to 96% - saving up to 35% in dissipated energy in one year compared to a more traditional UPS (91%) resulting in a faster payback period of four years.
  - High output power factor which at 0.9pF (1pF for models 160-200 kVA) provides up to 15% ( 20% for models 160-200 kVA) more active power compared to a more traditionally sized UPS - providing greater system expansion margin for further load increases.

## Specification

|                             |                           |
|-----------------------------|---------------------------|
| <b>Manufacturer</b>         | <i>Riello</i>             |
| <b>Power (Va)</b>           | <i>20,000Va</i>           |
| <b>Real Power (Watts)</b>   | <i>18,000 Watts</i>       |
| <b>Input Phase</b>          | <i>Three</i>              |
| <b>Output Phase</b>         | <i>Three</i>              |
| <b>Switch Rating (Amps)</b> | <i>63Amp</i>              |
| <b>Weight (Kgs)</b>         | <i>315Kg</i>              |
| <b>Depth (mm)</b>           | <i>850mm</i>              |
| <b>Width (mm)</b>           | <i>440mm</i>              |
| <b>Height (mm)</b>          | <i>1,320mm</i>            |
| <b>Communications</b>       | <i>Optional SNMP Card</i> |
| <b>Input Plugs</b>          | <i>Hardwired</i>          |
| <b>Output Sockets</b>       | <i>Hardwired</i>          |