

# Smart On-Line UPS

## 1KVA~10KVA

MARSRIVA Smart On-Line UPS offers high-density, genuine double-conversion online power protection tailored for servers, data networks, and medical labs, among other applications. With cutting-edge technology, the UPS achieves an impressive efficiency of up to 95.5% when operating in AC mode. Supporting a wide range of loads from 1KVA to 10KVA, our UPS is versatile and adaptable.

In addition to UPS models equipped with batteries for short backup times, our long-run configurations cater to business-critical systems that demand extended runtimes in hours. These long-run models can be customized with compatible battery packs to meet stringent runtime requirements.



1KVA



2KVA-3KVA



6KVA-10KVA



Extended Battery Module

## Features

- **High-Frequency Double Conversion Online with DSP Control**

Experience top-tier performance with our high-frequency double conversion online UPS, featuring advanced DSP control for optimal power management.

- **Up to 95.5% High Efficiency for Energy Conservation**

Achieve energy conservation with our UPS's impressive efficiency of up to 95.5%, ensuring a greener and more cost-effective power solution.

- **Supply Utility Power in the Event of Overload or Fault**

Ensuring continuous power supply, our UPS seamlessly switches to utility power in the event of an overload or fault, preventing disruptions to your critical systems.

- **Enhanced Application Availability**

Correct poor frequency and voltage conditions to guarantee higher application availability, providing a stable power environment for your connected loads.

- **Real-time Notification of Power Conditions**

Stay informed with real-time notifications about changes in utility power and UPS power conditions, empowering you to take prompt and informed action.

- **Temporary Battery Power During Outages**

Rely on our UPS to provide temporary battery power when utility power is unavailable, ensuring uninterrupted operation during unexpected outages.

- **Intuitive Control Panel for Quick Status Understanding**

Easily monitor unit and power status with our user-friendly control panel, offering quick insights into the health of your UPS.

- **Management via Serial Interface Ports**

Take control of your UPS through convenient serial interface ports, allowing for seamless management and configuration.

- **Support for Economic Operation Mode**

Optimize energy usage with our UPS's economic operation mode, contributing to energy-saving initiatives without compromising performance.

- **High Output Power Factor at 1.0PF**

Benefit from a high output power factor of 1.0PF, ensuring efficient power delivery and compatibility with a variety of loads.

- **Easy Recovery from Overloads**

Our UPS is designed for easy recovery from overloads, minimizing downtime and maintaining continuous operation.

- **Automatic Self-Test**

Ensure the reliability of your UPS with automatic self-tests, identifying and addressing potential issues before they impact performance.

- **Intelligent Battery Management**

Experience enhanced battery life and reliability with intelligent battery management, ensuring your UPS is always ready when you need it.

- **Wide Input Voltage Range**

Our UPS boasts a wide input voltage range, providing flexibility and adaptability to various power input conditions.

# Specifications

| Model                         | MR-US1KRT   | MR-US2KRT    | MR-US3KRT  | MR-US6KRT   | MR-US10KRT   |
|-------------------------------|---|--------------|--|---|--------------|
| <b>Rated Capacity</b>         | 1KVA / 1KW  | 2KVA / 2KW   | 3KVA / 3KW   | 6KVA / 6KW  | 10KVA / 10KW |
| <b>Topology</b>               | Double-conversion On-Line   |              |  |   |              |
| <b>Output</b>                 |   |              |  |   |              |
| Output voltage                | 208 / 220 / 230 / 240VAC  |              |  |   |              |
| Output frequency              | 50 / 60Hz $\pm$ 0.1 %   |              |  |   |              |
| Output Harmonic distortion    | $\leq$ 3% THD(linear load), $\leq$ 5% THD(non-linear load)  |              | $\leq$ 2% THD(linear load), $\leq$ 5% THD(non-linear load) |   |              |
| Output Power Factor           | 1.0   |              |  |   |              |
| Switching Time                | AC Mode to Battery Mode 0ms, Inverter to Bypass 4ms(Typical)                                      |              | 0ms.ECO Mode to Battery Mode 2ms                           |   |              |
| Waveform type                 | Pure Sine wave  |              |  |   |              |
| <b>Input</b>                  |   |              |  |   |              |
| Rated input voltage           | 208 / 220 / 230 / 240VAC  |              |  |   |              |
| Input voltage range           | 110-300VAC, 110-176VAC, 280-300VAC (power limited)  |              | 110-300VAC, 110-176VAC, 276-300VAC(power limited)          |   |              |
| Input frequency               | 50 / 60 $\pm$ 6Hz(Default), $\pm$ 10HZ(Adjustable)  |              |  |   |              |
| Input power factor            | $\geq$ 0.99   |              |  |   |              |
| <b>Full Load Efficiency</b>   |   |              |  |   |              |
| AC Mode                       | 94.5%@220VAC  | 95.5%@220VAC | 95.5%@220VAC   | Full load efficiency 95%, Maximum efficiency 95.5%                    |              |
| Battery Mode                  | 89.5%@36VDC   | 91.5%@72VDC  | 91.5%@96VDC  | Full load efficiency 94.8%(20pcs batteries), Maximum efficiency 95.3% |              |
| <b>Battery</b>                |   |              |  |   |              |
| Battery Type                  | Lead acid battery   |              |  |   |              |
| Battery Quantity              | 12V / 7Ah*2   | 12V / 7Ah*4  | 12V / 7Ah*6  | 12V / 7Ah*16  | 12V / 7Ah*16 |
| Charging Current              | 1.0A  |              |  |   |              |
| Typical recharge time         | 4 - 5 hours recover to 90% capacity   |              | 7 - 9 hours recover to 90% capacity                        |   |              |
| <b>Physical</b>               |   |              |  |   |              |
| Dimension, D*W*H (mm)         | 440*80*420  | 440*80*600   |  | 438*88*470 (Battery pack size:438*88*690)                             |              |
| Net weight (kg)               | 9.5   | 14.6         | 20.2   | 8.7   | 9.5          |
| Communication Interface       | RS232, USB, EPO   |              |  | RS232, USB, EPO, SNMP, Dry-contact, Maintenance Connector             |              |
| <b>Environment</b>            |   |              |  |   |              |
| Operating temperature         | 0°C – 40°C  |              |  |   |              |
| Storage temperature           | -15°C – 60°C (Battery:0°C – 40°C)   |              |  |   |              |
| Relative humidity             | 20 – 95% (non-condensing)   |              |  |   |              |
| Audible noise                 | Less than 50dB (1 meter from surface)   |              |  |   |              |
| <b>Standard and Approvals</b> |   |              |  |   |              |
| Safety                        | IEC / EN62040-1, IEC / EN60950-1  |              |  |   |              |
| EMC                           | IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8 |              |  |   |              |

Specifications are subject to change without notice, and all product drawings are for reference only. Consult MARSRIVA for the latest design and specifications.