

## Model # MU10KRM3U

**Smart Online double conversion Technology, 1-Ph, 200-240V, 50/60Hz, 10KVA/10KW with Dual bypass modes**

### Product Description

Magnizon MU10KRM3U 10kVA / 10000 watt Smart online, double-conversion UPS system offers complete power protection for critical applications. True online, double-conversion technology supports the critical loads with zero transfer time(0mSec), suitable for advanced networking applications. Fault-tolerant Static-bypass prevents unexpected service interruptions during UPS overload or internal fault conditions. With built-in manual bypass switch enables hot-swappable replacement of entire UPS power module with zero down time to connected equipment. Elegant LCD display with vast scope of monitoring and setting up of various parameters make UPS tailored for each specific application.



Front View



With Battery pack



Rear view

### Key Features

- Magnizon MU10KRM3U 10kVA/10KW smart on-line, double-conversion UPS system in 6U total rack/tower configuration (3U UPS power module and 3U external battery pack)
- Maintains full-time pure sine wave output within 2% of selectable 220/230/240V nominal during brownouts as low 110V and over voltages as high as 300V
- Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- Online double conversion technology with advanced DSP control
- Wide input voltage range(110~300VAC) can adapt to different power grid environment
- DC start (cold start) function
- Input PFC filters
- Built-in static bypass and manual bypass switches
- Parallel port to connect up to 3nos of 10KVA
- Input power factor 0.99 and unity Output power factor

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- Strong over load capacity
- Supporting rack/tower structure, high power density saving space
- Built-in protections: Over voltage, Over load, Over current, Battery overcharge, Battery deep discharge protection, battery low voltage protection
- LCD display and LED indicator show detailed UPS status and parameters
- Friendly man-machine interface, Simple setting Output Voltage, Frequency parameter and Bypass function on the display
- Lightning, surge, short -circuit protection
- Smart RS232 communication with monitoring software
- Double-conversion operation converts raw input from AC to DC, then resynthesizes output power back to perfect sine wave AC with enhanced protection from harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS types
- Supports 50/60Hz operation for worldwide frequency compatibility
- Expandable runtime is supported with optional BP192V9RM3U or any 192V battery DC bus external battery packs
- Intelligent battery management system with temperature-compensated charging with advanced 4-stage battery charging algorithm extends battery life
- Highly efficient operation in optional economy mode significantly reduces BTU heat output and operating energy costs
- Battery independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement
- Rack mount and tower mount kits included for both Battery pack and UPS module
- Adjustable telescopic rail kits suit any depth of the rack
- LED / LCD display panel rotates for viewing in rackmount or tower configurations
- Network-grade AC surge and noise suppression
- External battery packs are field replaceable and hot swappable

### Package Includes

- MU10KRM3U, 10KVA 3U power module
- BP192V9RM3U, 3U external battery pack
- Battery connection cables with connectors
- Four post compatible, telescopic adjustable rack rail kit -4 sets (2 for UPS and 2 for battery pack)
- Tower stands for upright tower configuration
- RS232 cabling and CD
- User manual

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### Specifications

Model no	MU10KRM3U
Capacity	10000VA/10000W
INPUT DATA	
Rated input current (Maximum Load)	51A (220V), 48.8A (230V), 46.8A (240V)
Nominal Input Voltage(s) Supported	220V AC; 230V AC; 240V AC
UPS Input Connection Type	Hardwire
UPS Input Connection Description	230/220/240V (L,N,PE) input wiring, 50/60Hz
Recommended Electrical Service	60A
Input Phase	Single-Phase, 3W system (L,N,PE)
OUTPUT DATA	
Output Volt Amp Capacity (VA)	10000
Output kVA Capacity (kVA)	10
Output Watt Capacity (Watts)	10000
Output kW Capacity (kW)	10
Output Capacity Details	Supports up to 110% load continuously in double conversion mode, 111 to 125% for 12minute, 126% to 150% for 55 seconds; Loads over 150% trigger immediate bypass mode operation to support loads directly from mains power; Double conversion mode is automatically restored as load levels are reduced to 95% or less
Power Factor	1.0
Crest Factor	3:01
Nominal Output Voltage(s) Supported	220V; 230V; 240V
Nominal Voltage Details	Voltage selection via front panel LCD interface
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Output Receptacle Details	International 220/230/240V (L,N,PE) hardwire output and 2xIEC C13
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
VOLTAGE REGULATIONS & SURGE DATA	
Voltage Regulation Description	2% output voltage regulation in standard online, double-conversion mode
Overvoltage Correction	Corrects over voltages up to 300V
Undervoltage Correction	Corrects under voltages as low as 110V
UPS AC Suppression Joule Rating	2680
UPS AC Suppression Response Time	Instantaneous

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EMI / RFI AC Noise Suppression	Yes
BATTERY DETAILS	
Full Load Runtime (min.)	4.5 min. (10000w)
Half Load Runtime (min.)	13 min. (5000w)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs
External Battery Pack Compatibility	BP192V9RT3U or any equivalent 192V DC bus battery bank
DC System Voltage (VDC)	192V
Battery charger rating	5Amp
Battery Recharge Rate (Included Batteries)	Less than 5 hours from 10% to 90% (typical, full load discharge)
Battery Replacement Description	Hot-swappable, user replaceable external battery packs
Expandable Runtime	Yes, with additional battery packs
Transfer Time	0mSec in online, double-conversion mode
Low Voltage Transfer to Battery Power	110V
High Voltage Transfer to Battery Power	300V
USER INTERFACE AND CONTROLS	
Front Panel LCD Display	Selectable LCD display with scroll and selection buttons enables UPS control and detailed monitoring options; LED/LCD panel rotates for viewing in rack/tower formats
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation; 2 additional switches support set and execute scrolling LCD functions;
Alarm Cancel Operation	Alarm cancel switch
Audible Alarm	Unique audible alarms for all major UPS, environmental and power conditions (see manual)
LED Indicators	LEDs indicate line power, online mode, economy/bypass mode, on-battery, charger and AC output status; LCD screen offers additional information and control options
PHYSICAL DETAILS	
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Included Mounting Accessory Description	2 sets of adjustable 4 post rack rails included; 2-9USTAND tower kit included
Primary Form Factor	Rackmount or tower mount
UPS Power Module Dimensions HWD/ cm)	13.4x 44.0 x 52.0
Rack Height	6U
Maximum Device Depth (cm)	82.55
Minimum Required Rack Depth (cm)	95.25
UPS Power Module Weight (kg)	28kgs

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UPS Dimensions Details	Includes 3U UPS/power module and 3U external battery pack
Included Battery Pack Weight (kg)	Kgs
Shipping Dimensions (HWD / cm)	78.74 x 66.04 x 104.14
Shipping Weight (kg)	116kgs
Cooling Method	Smart Fan with variable speed based on temperature
UPS Housing Material	Steel
Maximum Device Depth (mm)	620
Primary UPS Height (mm)	134
Primary UPS Width (mm)	440
Primary UPS Depth (mm)	520
<b>ENVIRONMENTAL</b>	
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius
Relative Humidity	0 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	3200
AC Economy Mode BTU / Hr. (Full Load)	1160
Battery Mode BTU / Hr. (Full Load)	4100
AC Mode Efficiency Rating (100% Load)	94%
AC Economy Mode Efficiency Rating-full Load	98%
Operating Elevation (ft.)	0-3000m (0 to 10,000 ft.)
Audible Noise	53 dBA at front side 1 meter
Operating Elevation (m)	0-3000 m
<b>COMMUNICATIONS</b>	
Communications Interface	RS232 Serial; Slot for SNMP/Web interface
Network Management Cards	SNMP-UP1
Software compatibility	Windows family all versions, Linux, Sun Network OS, IBM Aix, Compaq Tru64 SGI IRIX, FreeBSD, HP-UX and MAC
UPS monitoring Software	Supplied along with UPS. Optional SNMP card with web based available on request
Communications Cable	RS232 serial
<b>CERTIFICATIONS &amp; WARRANTY</b>	
UPS Certifications	CE, EN/IEC 62040-1:2008, EN/IEC 62040-2:2006, EN/IEC 61000-3-3:2013, EN/IEC 61000-3-2:2014
UPS Quality standards	ISO9001:2015, ISO14001:2015, RoHs
Product Warranty Period (Worldwide)	2-years limited warranty