

# Maxtron RT Series

## Rack / Tower Convertible

### 1kVA - 3kVA

TRUE ONLINE RT UPS  
- Single Phase

### Features

- High Frequency On Line Double Conversion Technology
- DSP (Digital Signal Processors) Control Technology
- Active Power Factor Correction (APFC), Input Power Factor up to 0.99
- Output Power Factor 0.8
- 2U Rackmount Form Factor Compatible with Standard 19" Racks Installation
- Wide Input Voltage Range (120V ~ 300VAC) and Frequency range (40~70Hz) Auto Sensing Frequency
- 50/60Hz Frequency Conversion
- Cold Start
- Rear Ventilation Design and Variable Speed Fan
- Effective Software and Hardware Protection
- Quick and Stable Charging, 90% Capacity Restored in 4 h
- Linear Derating in Low Voltage Input Reducing Battery Discharging Times
- Settable Delayed Start When Power is Restored
- Hot-swappable Battery
- Advanced Battery Management (ABM)
- Multiple Functions Settable via LCD: Output Voltage, EOD, Auto start, Bypass Mode, ECO Mode and Frequency Conversion Mode
- Multi-platform Communications: RS232, USB / RS485 / SNMP / AS400
- Overload, Short Circuit, Spike, Surge and Lightning Protection
- Idea hardware protection and software integration support with Windows and Linux such as some Hyperconverged Infrastructures (HCI) servers, storage systems and other IT equipment



Maxtron RT Series 1kVA-3kVA

### Maxtron RT Series 1kVA-3kVA Rear Panels

- |                                |                               |
|--------------------------------|-------------------------------|
| 1. Input Circuit Breaker       | 7. Output (3) IEC 320 C13     |
| 2. Input IEC 320 C14           | 8. Ventilation Fan            |
| 3. External Battery Connection | 9. Output (4) IEC 320 C13     |
| 4. Intelligent Slot            | 10. Input IEC 320 C20         |
| 5. USB Port                    | 11. Output (1) Terminal Block |
| 6. RS-232 Port                 |                               |



MX-1KR



MX-2KR



MX-3KR



# MAXTRON RT SERIES

## Technical Specification

MODEL	MAXTRON MX-1KR	MAXTRON MX-2KR	MAXTRON MX-3KR
Phase	Single Phase with Ground		
Capacity*	1000VA / 800W	2000VA / 1600W	3000VA / 2400W
Form Factor	2U Rackmount		
<b>INPUT</b>			
Nominal Voltage	200 / 208 / 220 / 230 / 240 VAC		
Voltage Range	120-300 VAC (Based on load at 50%)		
Frequency Range	40 Hz ~ 70 Hz		
Power Factor	≥0.99 @ Nominal Voltage (100% load)		
Input Connections	Fixed Input Plug with BS 1363A Plug		
<b>OUTPUT</b>			
Output Voltage	200 / 208 / 220 / 230 / 240 VAC		
AC Voltage Regulation (Battery Mode)	± 1%		
Frequency Range (Synchronized Range)	47~53 Hz or 57~63 Hz		
Frequency Range (Battery Mode)	50 Hz or 60 Hz ± 0.5 %		
Current Crest Ratio	3:1		
Total Harmonic Distortion (THDi)	≤ 3%THDi (Linear Load); ≤ 6%THDi (Non-linear Load)		
Output Connections	(3) IEC 320 C13	(4) IEC 320 C13 + (1) Terminal Block	
<b>TOPOLOGY</b>			
Transfer Time	AC Mode to DC Mode	0 ms	
	Inverter to Bypass	4 ms (Typical)	
Waveform (Battery Mode)	Pure Sinewave		
<b>EFFICIENCY</b>			
AC Mode	88%	89%	90%
Battery Mode	83%	87%	88%
<b>BATTERIES</b>			
DC Voltage	24V	48V	72V
Battery Capacity	12V 9AH		
Autonomy	Minimum 30 minutes or depending on the equipment loads		
Maximum Charging Current	1A		
Typical Recharge Time	4 hours to 90% capacity		
Charging Voltage	27.4 VDC ± 1%	54.7 VDC ± 1%	82.1 VDC ± 1%
<b>SYSTEM</b>			
LCD Display	Input/ Output Voltage, Load Level, Battery Level, UPS Status, Fault Conditions		
<b>SAFETY</b>			
Full Protection	Overload, Short Circuit, Spike, Surge and Lightning Protection		
<b>COMMUNICATIONS / MANAGEMENT</b>			
Power Management Software	Supports Windows® 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10, Linux, Unix and MAC		
Intelligent Slot	SNMP / AS400 / Modbus Card (Optional)		
<b>STANDARDS / APPROVALS</b>			
Compliances	SIRIM, CE, EN 62040-2, EN 61000-3-2, EN 61000-3-3		
IP Rating	IP 20		
<b>ENVIRONMENT</b>			
Operating Temperature	0°C ~ 40°C		
Relative Humidity	20%-90% (non-condensing)		
Acoustic Level at 1m	≤ 50 dB		
<b>PHYSICAL PROPERTIES</b>			
Dimensions (W × D × H) mm	438 × 310 × 88	438 × 410 × 88	438 × 630 × 88
Net Weight (kg)	12.0	19.0	29.3
<b>WARRANTY &amp; SUPPORT</b>			
Product Warranty	3 year warranty on UPS Parts and Labour. 2 year warranty on VRLA Rechargeable Batteries.		

\* Derate capacity to 80% in frequency converter mode when the output voltage is adjusted to 200 / 208VAC.

• Changes to the specification contained in this document, and to prices are reserved; so are errors and omissions. Only order confirmations and technical documentation by KOSS UPS is binding.

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