

# KR11-RM Series UPS 1-10kVA

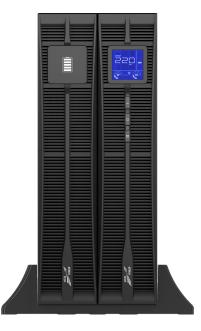
Stock Code



Kehua Data Co., Ltd.

www.kehua.com

## **KR11-RM Series UPS**



- » 3 Level Technology
- » Rack and Tower Design
- » Output PF up to 1.0
- » AC/AC Efficiency up to 95.5%
- » Hot-Swappable Battery Design
- » Comformal Coating for All PCB
- » Support 8A Charging Current

#### Reliable and Flexible Uninterruptible Power Supply(UPS) for high uptime and high performance

Kehua KR-RM 1-10k series ups is an online double conversion solution with high density and hotswappable design which offer the high uptime, small footprint and operation flexibility.



#### **Typical Applications:**





Finance











n Edge Application Servers

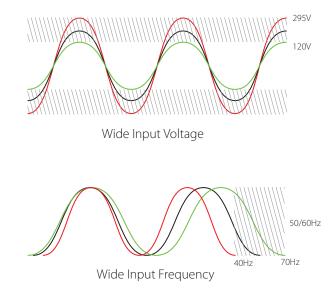
Local Area Network

Security Mec Equip

Medical Equipment



- The most advanced DSP control prevents single failure point and increase performance.
- Wide input voltage range and wide input frequency range 40-70Hz with high grid adaptability and prolong battery life.
- High-end key components, improve the system reliability
- **Standard conformal coating** to all PCB boards, protect electronics from environmental effection such as dust, salt spray and corrosion.
- Generator compatible ensure the clean power for extend power outage
- UPS power on **self diagnosis**, timely detection of hidden faults, ensuring UPS safety and avoiding unnecessary losses.
- EPO function as standard for immediataly remove power from connected load for emergency
- **Cold start** function which allow UPS start on battery when grid isn't available.

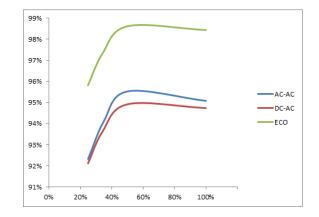




Conformal Coating

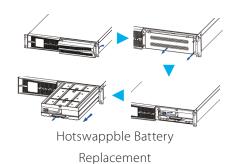


- **3 level technology** for input power factor up to 0.996, Low THDi < **4%**, decrease pollution to city power
- AC/AC efficiency up to **95.5%** and ECO mode up to 98.5%, less TCO and more energy saving
- Output power factor up to **1.0**, more powerful to connect more critical loads





- Rack and tower compact design for internal battery 2U for 1-3kVA, 4U for 6-10kVA
- **Integrated solution** that combines electronics and batteries in one single unit.
- **hot-swappable battery** modules internal and external make sure minimum downtime of the device which can be changed during operation
- 1-8A settable charger for longer back up time\*.
- **Programmable outlet** (1-3kVA) help to extend runtime for the most critical loads and smart disconnection of the less critical ones
- Frequency converter mode
- Batteries number settable via software (16/17/18/19/20 for 6-10kVA)
- Input frequency 50/60 Hz **self-adaption**, no need manual setting.
- **Multiple socket** for 1-3KVA, 6-10k Terminal block+2 IEC C13 output to meet global Multiple application.
- Blue LCD screen with **140° visual angle**, easy for user to check the data.
- LCD display easily shift through display setting to meet for vertical/horizontal installation.
- Fault code specific showing which easy for service and maintainence.



Programmable Outlet(1-3kVA)



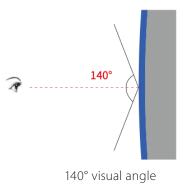
Frequency Converter Mode



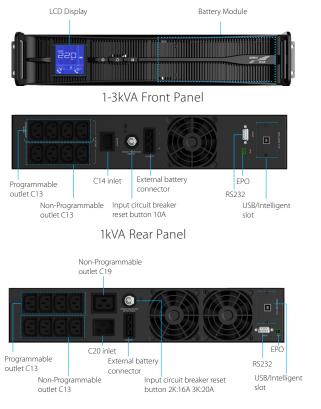
Horizontal Display



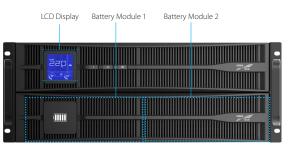
Vertical Display



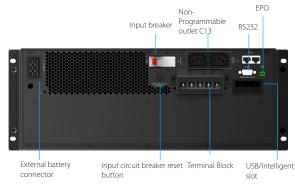
#### **UPS Structure**



2-3kVA Rear Panel



6-10kVA Front Panel



6-10kVA Rear Panel

#### **EBM Structure**



Hot-swappable battery module (1~3K)





External battery module (6~10K)

## **KR11-RM Series UPS**



- 19 inch rail kit
- Tower Kit
- Internal SNMP Wiseway 502S
- External SNMP Wiseway 501S
- Dry contact Kit
- Protocol transfer kit
- 7A inbuild charger module for 1-3K
- Hot-swappable External Battery Module (1-3kVA)
- External Battery Module (6-10kVA)
- Intelligent Battery Monitoring System
- Battery Charge Temperature Compensation



19 inch Rail Kit





Internal SNMP Kit

External SNMP Kit





Protocol transfer kit

Dry contact kit





Tower Kit

Battery charge temperature compensation

#### **Technical Specifications**

| MODEL                               | KR1000-RM   | KR2000-RM       | KR3000-RM                 | KR6000-RM   | KR1110S-RM     |
|-------------------------------------|---|-----------------|---------------------------|---|----------------|
|                                     |   | Input           |                           |   |                |
| Voltage (Vac)                       | 120-295   |                 |                           | 80-275  |                |
| Frequency (Hz)                      | 40-70 (50/60Hz auto-sensing)  |                 |                           |   |                |
| Power Factor                        | ≥0.99   |                 |                           |   |                |
| THDi                                |   |                 | <4% (full linear load)    |   |                |
|                                     |   | Output          |                           |   | 1              |
| Capacity(VA)                        | 1000  | 2000            | 3000                      | 6000  | 10000          |
| AC/AC Efficiency Max.               | 92.5%   | 93.5%           | 93.8%                     | 95.5%   | 95.5%          |
| Power Factor                        | 0.9/1.0   |                 |                           |   |                |
| Voltage (Vac)                       | 208/220/230/240±1% (selectable on display panel)  |                 |                           |   |                |
| Frequency(Hz)                       | 50/60±0.1 (battery mode)  |                 |                           |   |                |
| THDv                                | THD <2% (linear load ), THD < 3% (nonlinear load)   |                 |                           | THD <1% (linear load ), THD < 4% (nonlinear loa                                   |                |
| Overload*                           | PF0.9:101~105% load long run,106~110% load 10 mins, 111~130% load 1 min,<br>131~150% load 1s, above 150% load 200 ms<br>PF1.0:101~105% 1min,106~120% 5s, over 120% 200 ms |                 |                           | ,<br>101~105% Long run, 106~130% load for 10min<br>131~150% 30s, over 150% 500ms. |                |
| Transfer Time                       | 0   |                 |                           |   |                |
| Current Crest Ratio                 | 3:1   |                 |                           |   |                |
|                                     |   | Battery         |                           |   |                |
| Voltage(Vdc)                        | 36 48 72  |                 |                           | 192-240   |                |
| UPS Internal Battery(VRLA)          | 3×7Ah/12V   | 4×9Ah/12V       | 6×9Ah/12V                 | 2*8×7Ah/12V   | 2*8×9Ah/12V    |
| External Battery Module (EBM) Model | B2U-36-01-2B  | B2U-48-02-2B    | B2U-72-03-2B              | B3U-192-20-2C   | B3U-192-20-2C  |
| EBM battery(VRLA)                   | 2*3*7AH/12V   | 2*4*9AH/12V     | 2*6*9AH/12V               | 2*8*7AH/12V   | 2*8*9AH/12V    |
| Charging Current (A).               |   |                 |                           |   | I∼8A settable  |
|                                     |   | Other           |                           | ·   |                |
| Communication Interface             |   |                 | PLISB RS485+Dry contact a | re optional in clot)  |                |
|                                     | RS232+EPO (SNMP, USB,RS485+Dry contact are optional in slot)       8xIEC320 C13     8xIEC320 C13 + 1xIEC320 C19   Terminal + 2xIEC320 C13                                 |                 |                           |   |                |
| Output Outlet                       | 8XIEC320 C13  |                 |                           |   | 2XIEC320 C13   |
| Display                             | Blue screen LCD (Software rotate)   |                 |                           |   |                |
| Display Details                     | AC input & output voltage, frequency, Load level, Battery level, Temperature; AC mode, Battery mode, Bypass mode, and Fault   |                 |                           |   |                |
| Alarm                               | Low battery, Abnormal AC input, UPS failure, etc.   |                 |                           |   |                |
| Protection                          | Low battery, overload, short-circuit and over temperature, etc.   |                 |                           |   |                |
| Noise (dB)                          | < 50  |                 |                           | < 55  |                |
| Working Temperature*                | -5~ 50°C ( 40~50°C auto derating)   |                 |                           |   |                |
| Relative Humidity                   | 0 ~ 95%, No condensation  |                 |                           |   |                |
| Altitude(m)                         | 1000, no derate.  |                 |                           |   |                |
| Regulatory Approvals                | CE, IEC62040-1, IEC62040-2  |                 |                           |   |                |
| UPS (W×D×H)(mm)                     | 438×420×87(2U) 438×570×87(2U)   |                 |                           | 438×660×174(4U)   |                |
| UPS Weight (kg)                     | 14  | 20              | 26                        | 55.6  | 64             |
|                                     | -   |                 |                           |   |                |
| External Battery Module (W×D×H)(mm) | 438×420×87(2U)  | 438×570×87 (2U) | 438×570×87 (2U)           | 438×500×130   | (3U)(16*7/9AH) |

Specification is subject to change without prior notice.
 \* Condition comply



# **Reliable • Flexible • Responsible**

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