

UPS RM 4U 5000VA-6000VA

Industrial Communication Ports Compact, Minimal Heigth Five-Year Warranty



"...power alliance ... "

DESCRIPTION

AETES's 19" Rack Mountable RM 4U series UPS are designed to provide conditioned power to electronic control systems and other sensitive electronic equipment. AETES RM 4U UPS is a Double Conversion, On-line UPS, protects your equipment from voltage sags, spikes and complete power failure that may interrupt critical systems, cause data loss and even damage equipment; continuously conditions and regulates its output voltage.

FEATURES

- True On-Line Double Conversion
- Selectable ECO-MODE operation for Higher Effiency
- UPS Monitoring and Automatic Shutdown Software
- Low output voltage ripple and high reliability
- LCD display, showing measurements, status and alarm messages
- Audible alarm and Led displays for easy observation of UPS status
- EPO Port Ready Emergency Power Off Switch
- Setup of Voltage and Frequency from front panel
- Over Load, Over Temperature, Short Circuit protections
- Wide input voltage range
- Cold Start; DC Power On

OPTIONS

- External DC Power Socket and Additional Battery Modules for Longer Backup Time
- SNMP Web/Network Management Module
- Dry Contact Relay Module
- USB-B Communication Port
- RS485 ModBUS Communication Module
- Remote Monitoring Panel

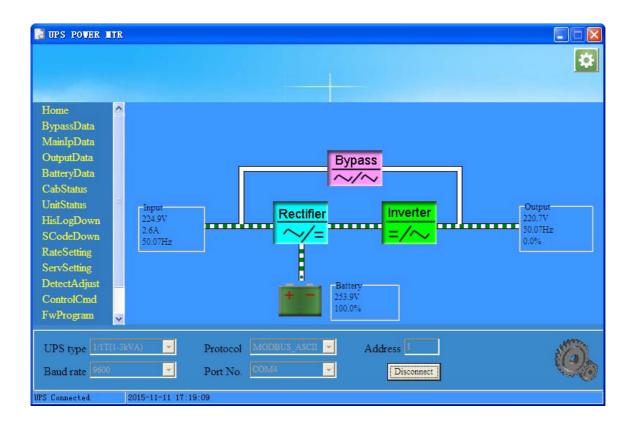
GENERAL SPECIFICATION

| MODEL | RM 4U 5000 | RM 4U 6000 | |
|---|---|---|--|
| Гороlоду | True On-Line, Double Conversion | | |
| On-battery Output Waveform | True Sine Wave | | |
| Maximum Capacity | 5000VA / 5000W | 6000VA / 6000W | |
| INPUT | | | |
| AC Input Type | Single Phase (P+N+G) | | |
| Nominal Input Voltage | 208/ 220/ 230/ 240 VAC | | |
| nput Voltage Range | 176V 286 V AC | | |
| Nominal Input Frequency | 50Hz / 60Hz (Auto Sensing) | | |
| Input Frequency Range | 4070 Hz | | |
| nput PFC | >0.98 @ | Full load | |
| OUTPUT | | | |
| Nominal Output Voltage | 208/ 220/ 230/ 240 VAC (Selectable) | | |
| Output Voltage Regulation | Rated Voltage +/-1% | | |
| Dutput T.H.D | <1% THD at L | <1% THD at Linear Load | |
| Efficiency AC to AC (Eco Mode) | <97% | | |
| Crest Factor | 3 : | 3:1 | |
| Start on Battery | Ye | 25 | |
| Auto Restart | Ye | 2S | |
| Output Socket Types | Cable Terminal | Cable Terminal | |
| PROTECTION | | | |
| Surge Protection | Input Power Line and Ext | ernal Data Line Protection | |
| Overload Protection | 130% Load for 60sec 150% of 30sec (Batt. Mode; 130% Load for 10sec) | | |
| Short Circuit Protection | UPS output cut off immediately | | |
| | | | |
| BATTERY Internal Battery Set | 8-Year Life AETES 12V33.8W ×16 | 8-Year-Life AETES 12V33.8W ×16 | |
| Typical Backup Time (Full / Half load)* | 7/ 17 min | 6/ 15 min | |
| Recharge Time to 90% (Typical) | <8 H | ours | |
| DIAGNOSTICS | | | |
| | | | |
| Front Danel I CD and I EDa | AC mode / On line / On hattery / Rypace / | Fault / Overload and other parameters | |
| | AC mode / On line / On battery / Bypass / Battery Mode / UP | | |
| Front Panel LCD and LEDs Audible Alarms | | Fault / Overload and other parameters S Faults / Overload | |
| Audible Alarms | Battery Mode / UP | S Faults / Overload | |
| Audible Alarms COMMUNICATION Communication Port | Battery Mode / UP Standard; RS232 (Optional; USB- | S Faults / Overload B or AS400 or Dry Contact Module) | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module | Battery Mode / UP Standard; RS232 (Optional; USB- | S Faults / Overload | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL | Battery Mode / UP Standard; RS232 (Optional; USB- Opt | S Faults / Overload B or AS400 or Dry Contact Module) onal | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL Operation Temperature | Battery Mode / UP Standard; RS232 (Optional; USB- Opt Opt | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL Operation Temperature Storage Temparature | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20 | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIRONMENTAL Operation Temperature Storage Temparature Relative Humidity | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20- 0~95% humidity, | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C non-condensing | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL Operation Temperature Storage Temparature Relative Humidity Audible Noise | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20 | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C non-condensing | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL Operation Temperature Storage Temparature Relative Humidity Audible Noise COMPATIBILITY | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20- 0~95% humidity, < 40dBA (at 1 meter | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C non-condensing from surface of unit) | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIRONMENTAL Operation Temperature Storage Temparature Relative Humidity Audible Noise COMPATIBILITY Safety | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20- 0~95% humidity, < 40dBA (at 1 meter | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C non-condensing from surface of unit) 52040-1-1 | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL Operation Temperature Storage Temparature Relative Humidity Audible Noise COMPATIBILITY Safety EMI | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20- 0~95% humidity, < 40dBA (at 1 meter | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C non-condensing from surface of unit) | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL Operation Temperature Storage Temparature Relative Humidity Audible Noise COMPATIBILITY Safety EMI PHYSICAL | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20- 0~95% humidity, < 40dBA (at 1 meter IEC/EN 620- | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C non-condensing from surface of unit) 52040-1-1 40-2 /Class A | |
| Audible Alarms COMMUNICATION Communication Port SNMP Network Management Module ENVIR ONMENTAL Operation Temperature Storage Temparature Relative Humidity Audible Noise COMPATIBILITY Safety EMI PHYSICAL Dimensions (WxDxH) (mm) | Battery Mode / UP Standard; RS232 (Optional; USB- Opt 0~ -20- 0~95% humidity, < 40dBA (at 1 meter IEC/EN 620- 438×660×176 | S Faults / Overload B or AS400 or Dry Contact Module) onal 40°C -70°C non-condensing from surface of unit) 52040-1-1 40-2 /Class A 438×660×176 | |
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MONITORING SOFTWARE

AETES Power Monitor software (UPS Power MTR) is designed for monitoring and setting RM UPS series. Its serial cable can be connected directly from UPS's RS232 or USB-B port to the your system computer's serial port. For example, the UPS event history log can be viewed on the interface or downloaded as a file.





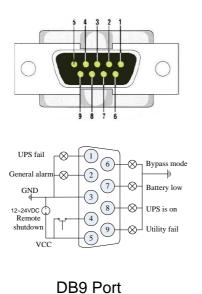
AETES UPS Monitoring Software Interface Main Page

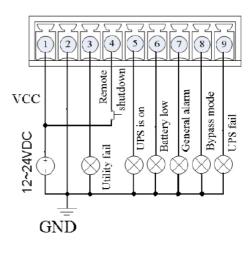
DRY CONTACT RELAY MODULE

It is one of the optional modules that can be used in the Intelligent Slot. There are two connection types of Relay Card for option: DB9 or CableTerminal. Max output current for Dry Contacts on Relay Card is 1 Amp. The function of outputs are listed as below:

| FUNCTION | DB9 | TERMINAL | DESCRIPTION |
|------------|-----|----------|---|
| UPS fault | 1 | 9 | Opened from common connection: UPS is abnormal. |
| | | | Closed: UPS is normal |
| General | 2 | 7 | Opened from common connection: UPS is warning |
| | | | Closed: UPS is normal |
| GND | 3 | 2 | Internal GND, used to connect external power supply 12 24Vdc |
| Remoted | 4 | 4 | Input port. Used with external power supply. |
| shutdown | | | If connected to power supply, UPS transfer to bypass. |
| | | | UPS shutdown if bypass is abnormal |
| Common | 5 | 1 | Common connection of output signal. |
| connection | | | Connected to power supplyfor input signal. Shown as Fig 5 2. |
| Bypass | 6 | 8 | Closed to common connection: UPS is working in bypass mode |
| mode | | | Opened: UPS is not working in bypass mode |
| Battery | 7 | 6 | Opened from common connection: battery low alarm |
| low | | | Closed: battery capacity is normal or not in battery mode |
| Normal | 8 | 5 | Closed from common connection: UPS is working in normal mode. |
| mode | | | |
| Utility | 9 | 3 | Opened form common connection: Utility input is failure |
| failure | | | |

DESCRIPTION OF RELAY MODULE PINS



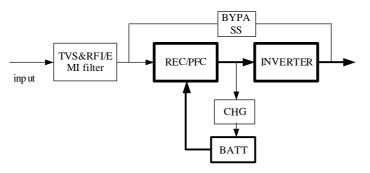


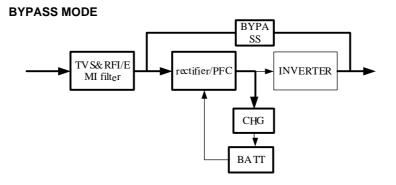
Cable Terminal

Fig.8 Wiring Diagram of Dry Contact Relay Card

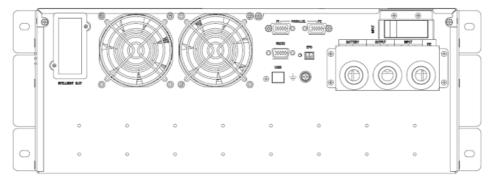
BLOCK DIAGRAM

BATTERY MODE

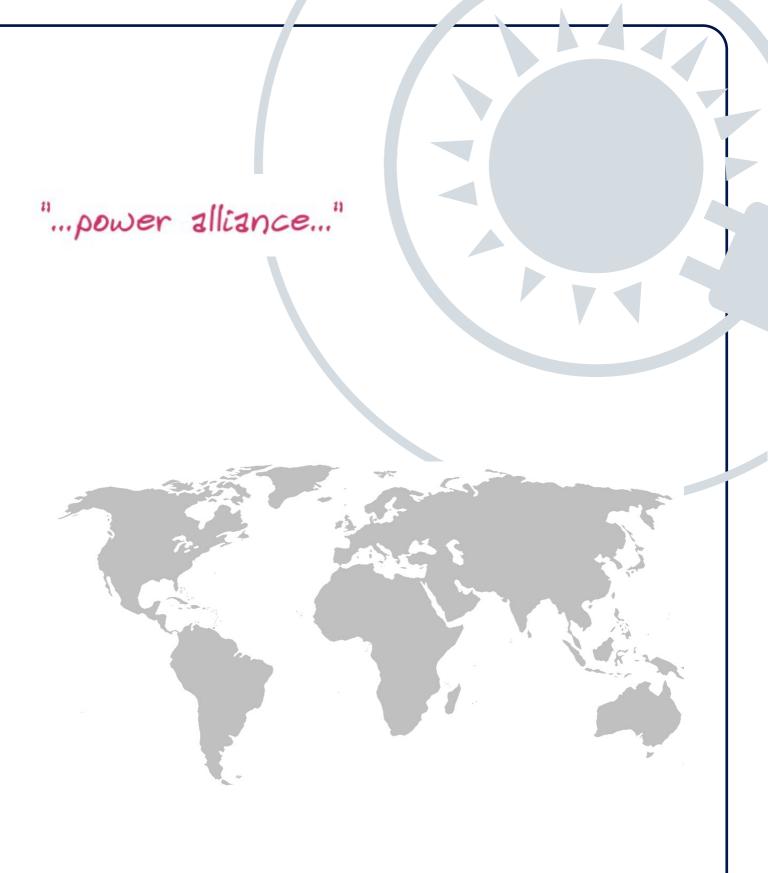




BACK PANEL



AETES RM 4U 5000 / RM 4U 6000





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