

Solutions behind the power

RM11 Series Rack UPS



- Online double conversion
- Power Range 1~10 kVA
- 1-Phase in/1-Phase out
- Output PF=1
- 3-level topology
- Digital charging function

Applications



Government



Finance



IT



Education



Transportation



Medical



Energy

The RM11 series is Atenco's online single-phase UPS series, which includes rack UPS units with power ranging from 1kVA to 10KVA. This series of UPS adopts the latest **IGBT technology**, ensuring efficiency up to 96% while significantly reducing harmonic interference.

All UPS models can be equipped with an optional external **manual bypass breaker**, allowing maintenance to be performed without interrupting the output.

1-10kVA
PROTECTION LEVEL 10

- Power Back up
- Smart fan speed
- Voltage Protector
- Overload Protection
- Temperature Monitoring
- Surge Protector
- 3-level Topology
- Voltage Regulator
- Emergency Power Off
- Isolation Cabin Protection

RM11 Series Feature

Performance

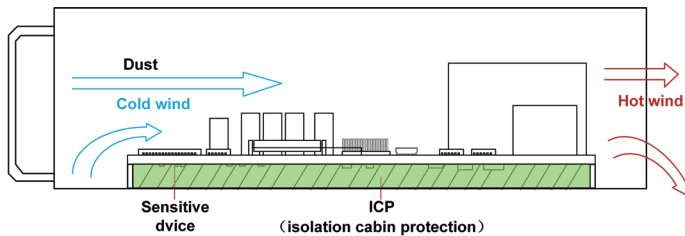
The temperature of key components is lower than 100% when running at full load.

The **output power factor** is equal to 1, with better load capacity at the same power, reducing the initial investment cost

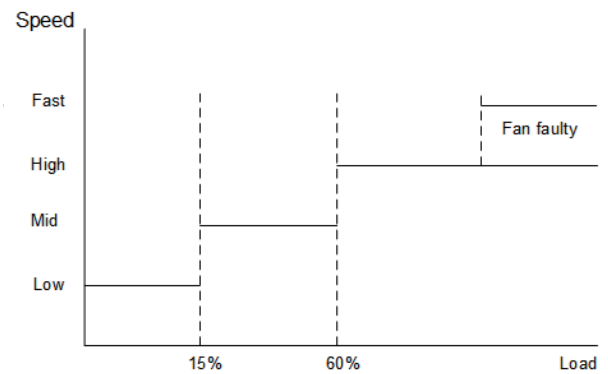
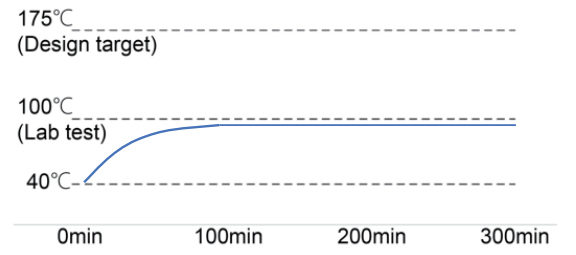
All dust-sensitive devices are placed in **ICP**, which are completely independent and dust-free, effectively improving reliability in harsh environments.

Charging current supports digital adjustment.
(1-3 kVA long backup model, 1-12A)

Automatically detect machine load rate and adjust fan speed according to key equipment temperature.



Full load temperature change curve



Configuration

The **LCD** is paired with indicator lights, making it convenient for personnel to view equipment information.

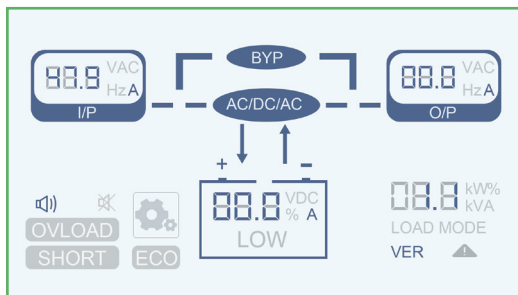
Battery number supports 16/18/20/22/24 PCS.
(6-10 kVA)

Intelligent slot facilitates the expansion of device functionality(SMNP card/AS400 Card/RS485 card optional)

Supporting the **IoT** management platform by MQTT protocol.

Output 208/220/230/240 Vac, 50 / 60Hz voltage, configurable from display

All model can mount in 19 inch rack, or install as tower UPS.



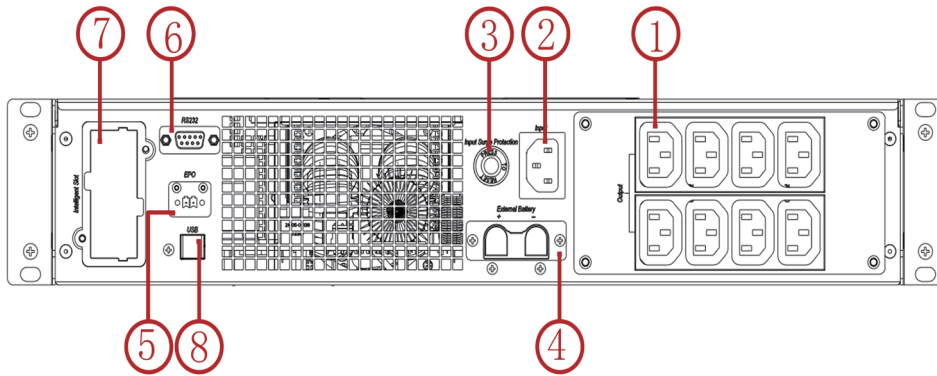
LCD interface



IOT function

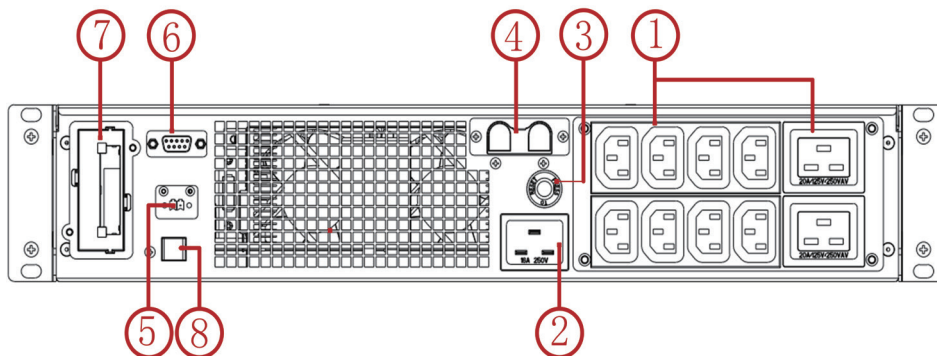
Rear Panel

RM11-1KVA-B / RM11-1KVA-L



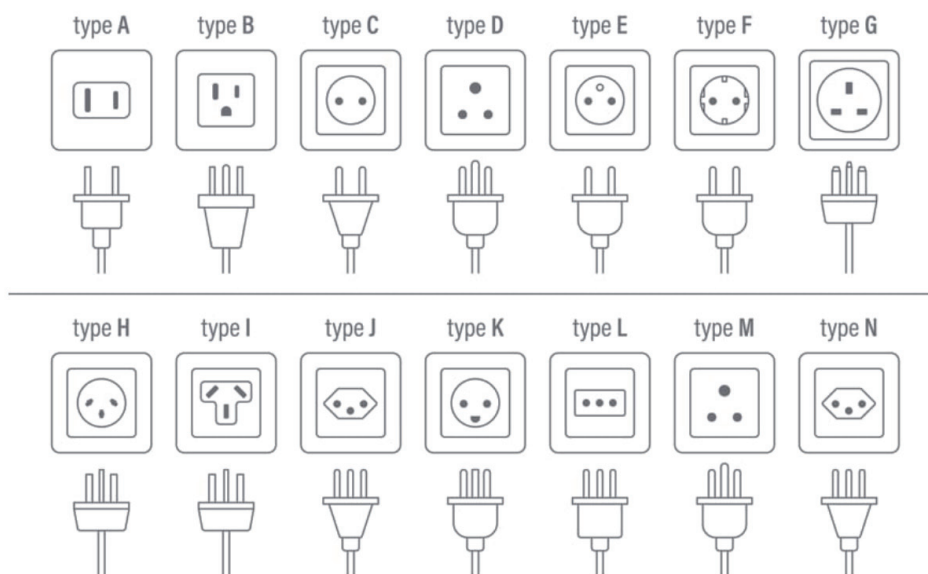
1. Output Socket
2. Main Input Socket
3. Surge Protector
4. External Battery Port
5. EPO Dry Contact
6. RS232 Port
7. Intelligent Slot
8. USB Port

RM11-2KVA-B / RM11-2KVA-L / RM11-3KVA-B / RM11-3KVA-L

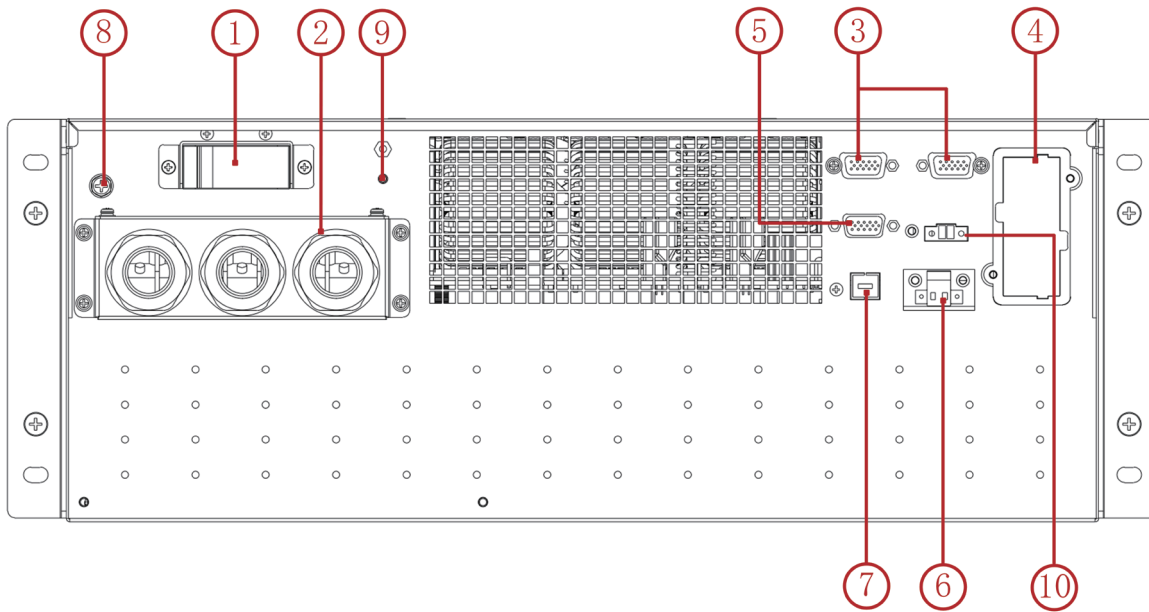


1. Output Socket
2. Main Input Socket
3. Surge Protector
4. External Battery Port
5. EPO Dry Contact
6. RS232 Port
7. Intelligent Slot
8. USB Port

Output sockets(OPTIONAL)

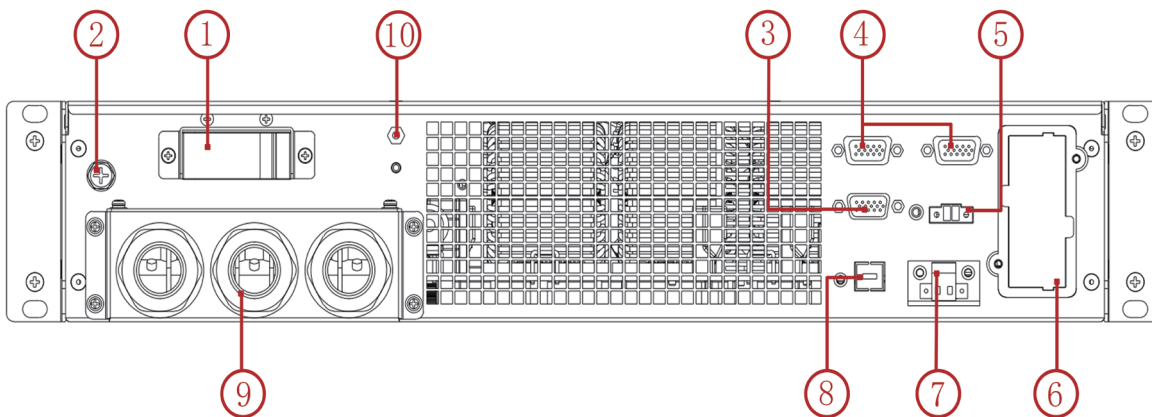


RM11-6KVA-B / RM11-10KVA-B

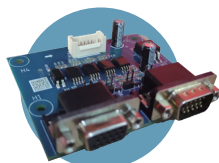


- | | |
|---------------------|-----------------------|
| 1. Bypass Breaker | 6. RS485 Port |
| 2. Wiring Terminal | 7. USB Slot |
| 3. Parallel Port | 8. Grounding Terminal |
| 4. Intelligent Slot | 9. Cold start |
| 5. RS232 Port | 10. EPO Dry Contact |

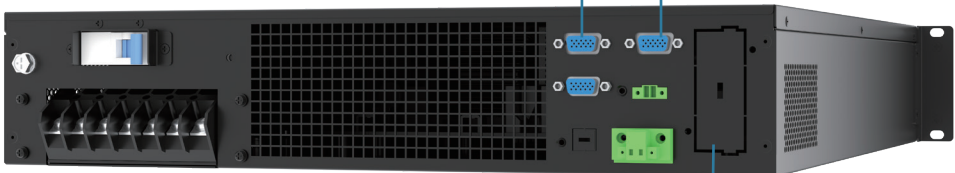
RM11-6KVA-L / RM11-10KVA-L



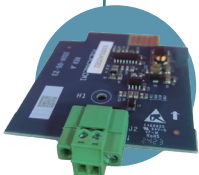
- | | |
|-----------------------|---------------------|
| 1. Bypass Breaker | 6. Intelligent Slot |
| 2. Grounding Terminal | 7. RS485 Port |
| 3. RS232 Port | 8. USB Port |
| 4. Parallel Slot | 9. Wiring Terminal |
| 5. EPO Dry Contact | 10. Cold Start |



Parallel card



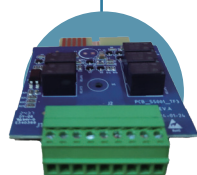
Intelligent Slot



RS485 card



SNMP card



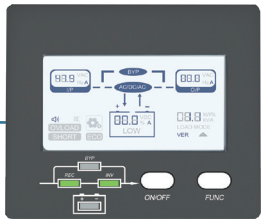
AS400 card



Holder



(LCD can be rotated)



Standard screen



Color screen

Specifications

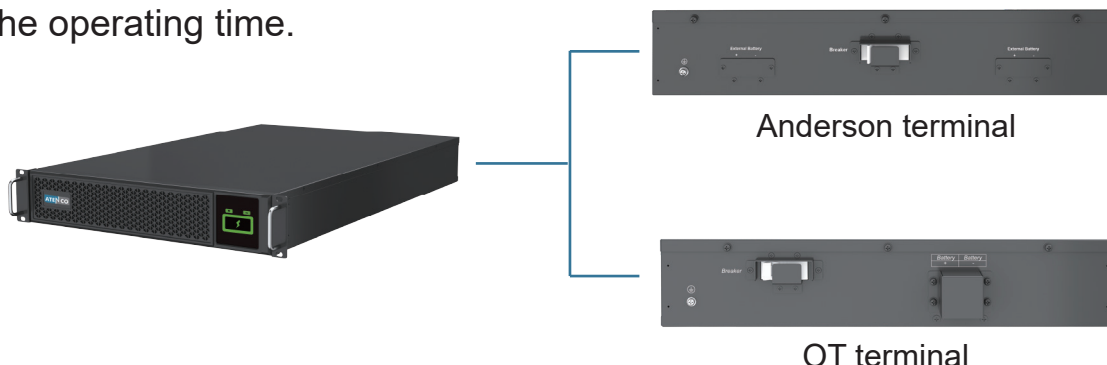
Model	RM11-1KVA-B	RM11-1KVA-L	RM11-2KVA-B	RM11-2KVA-L	RM11-3KVA-B	RM11-3KVA-L
Rate Power	1kVA/1kW	1kVA/1kW	2kVA/2kW	2kVA/2kW	3kVA/3kW	3kVA/3kW
Cold start	Default output 50/60Hz					
Input voltage range	110~300VAC;100% load@176VAC~276VAC, 100%~50% power derating@110VAC~176VAC, 50% load@276VAC~300VAC					
Input power factor	≥0.99					
Frequency range	50/60±5Hz(default),±3Hz/±10Hz(settable)					
Output power factor	1.0					
Output	Rate voltage	220/230/240VAC, 200/208VAC(PF=0.9)				
	Load response	≤5% (0% - 100% -0% step load)				
	Recovery time	≤40ms (0% - 100% -0% step load)				
	Output THDu	≤2% , Linear load ; ≤ 5% non-linear load according to IEC62040-3				
Transfer time	Main to BAT	0				
	INV to BYP	4ms				
Efficiency (normal mode)	Max 96%					
Noise (1 meter)	43dB@<60%load, 47dB@>60%load		<50dB@<60%load,<55dB@>60%load		<50dB@<60%load,<55dB@>60%load	
Overload	Normal	102%~110%: 30mins, 110%~125%:10mins, 125%~150%: 30 seconds				
	Battery mode	102%~110%: 1min, 110%~125%: 10 seconds, 125%~150%:5 seconds				
	Bypass mode	<130%: long time, 130%~150%:10mins, 150%~180%:5 seconds				
Battery	Quantity	2(12VDC*9Ah) 3(12VDC*7/9Ah)	Depend on external battery	4(12VDC*9Ah) 6(12VDC*7/9Ah)	Depend on external battery	6(12VDC*7/9Ah) Depend on external battery
	Max charging	1A	1-12A(optional)	1A	1-12A(optional)	1A 1-12A(optional)
	Rate voltage	24/36VDC		48/72VDC		72VDC
Standard	EPO, RS232					
Option	SNMP card,AS400, USB, RS485, Air filter					
Dimension ,W*D*H(mm)	440*440*86		440*580*86	440*440*86	440*580*86	440*440*86
Weight (kg)	19	9.5	27.5	9.7	28	10

Model	RM11-6KVA-B	RM11-6KVA-L	RM11-10KVA-B	RM11-10KVA-L
Rate Power	6kVA/6kW	6kVA/6kW	10kVA/10kW	10kVA/10kW
Cold start	Default output 50/60Hz			
Input voltage range	110 288VAC 100% load@>176VAC 90% load@>154VAC 75% load@>132VAC 50% load@>110VAC			
Input power factor	≥0.99			
Frequency range	40-70Hz			
Output power factor	1.0			
Output	Rate voltage	220/230/240VAC,200/208VAC(PF=0.9)		
	Load response	≤5% (0% - 100% -0%)		
	Recovery time	≤40ms (0% - 100% -0%)		
	THDu	≤1%, linear load ;≤ 5% , non-linear load according to IEC62040-3		
Transfer time-Main to Battery		0ms		
Transfer time-INV to BYP		0ms		
Crest factor		3:1		
Battery type	12VDC/7Ah	External battery	12VDC/9Ah	External battery
Battery Number	16PCS	16-24 PCS settable	16PCS	16-24 PCS settable
Battery voltage	Default 192VDC ,settable			
Max charging	1A	5A	1A	5A
Efficiency –normal mode		Max 95%		
Noise (1 meter)		<58dB		
Overload	Normal mode	105%~110%: 10mins,111%~125%: 1 min,126%~150%: 30 seconds		
	ECO mode	<125%: long time,126%~130%:5mins,131%~150%:1min,>150% :200ms		
Communication		RS232, EPO, RS485		
Option		AS400, USB, SNMP card, 12A charger, Parallel kit, Air filter		
Dimension W*D*H(mm)		440*660*172	440*580*86	440*660*172
Weight(kg)		62.5	16	63

Statement: The products will continue to be innovative and optimized, which may lead to asynchronous updates of the actual product and promotional materials. Therefore, this document is for reference only and does not constitute any offer or commitment.

Rack Battery Pack Specifications

The UPS is available with internal battery models or can be combined with **external battery package** to extend the operating time.



1-3 kVA Battery Pack

Model	RC0424A	RC0636A	RC0672A	RC0848A	RC0896A	RC1272A
Battery System						
Battery type	VRLA(Lead acid maintenance free battery)					
Typical battery recharging time	6-8 hours(To 90% of full capacity)					
Typical battery life	3-5years, depend on discharging cycle and ambient temperature					
System voltage	24Vdc	36Vdc	72Vdc	48Vdc	96Vdc	72Vdc
Charging current(Max.)	1.4/1.8A					
Battery quantity	2*2 PCS	2*3 PCS	6 PCS	2*4 PCS	8 PCS	2*6 PCS
Capacity	12V*7AH/12V*9AH					
Physical						
Dimension W*D*H	440*438*86			440*438*86		440*579*86
Net weight	19.6kg	24.3kg		29.2kg		34.1kg

6-10 kVA Battery Pack

Model	RC16192A	RC20240A
Battery System		
Battery type	VRLA(Lead acid maintenance free battery)	
Typical battery recharging time	6-8 hours(To 90% of full capacity)	
Typical battery life	3-5years, depend on discharging cycle and ambient temperature	
System voltage	192Vdc	240Vdc
Charging current(Max.)	1.4/1.8A	
Battery quantity	16 PCS	20 PCS
Capacity	12V*7AH/12V*9AH	
Physical		
Dimension W*D*H	440*740*86	440*586*130
Net weight	43.9kg	53.7kg

- 1.The products will continue to be innovative and optimized
- 2.Data above are typical values for reference only, not as a basis for engineering design
- 3.Remark :RC08048A; "08"means battery number inside the Rack;
"048"means the battery system voltage, "RC"means Rack Cabinet



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