

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

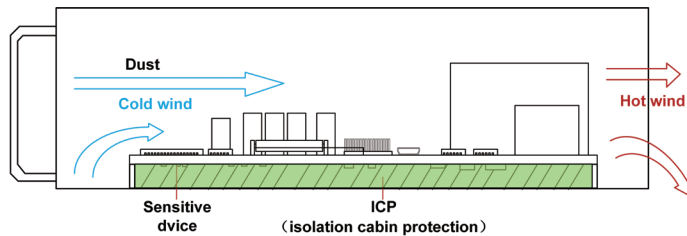
The temperature of key components is lower than 100% when running at full load.

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

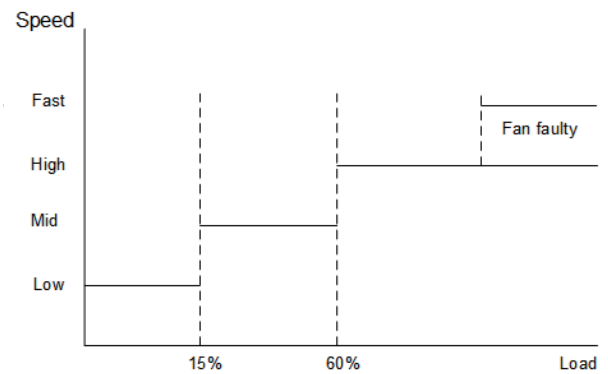
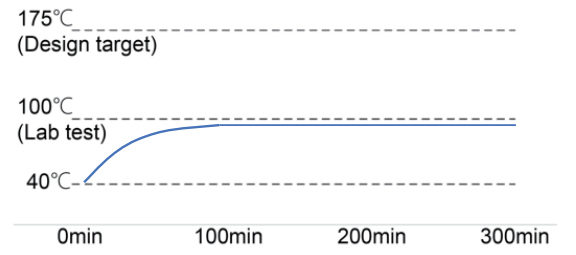
All dust-sensitive devices are placed in **ICP**, which are completely independent and dust-free, effectively improving reliability in harsh environments.

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.

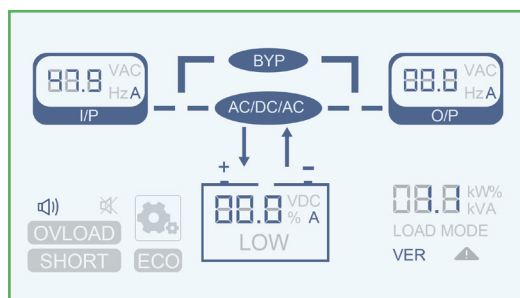
Battery number supports 16/18/20/22/24 PCS.
(6-10 kVA)

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.



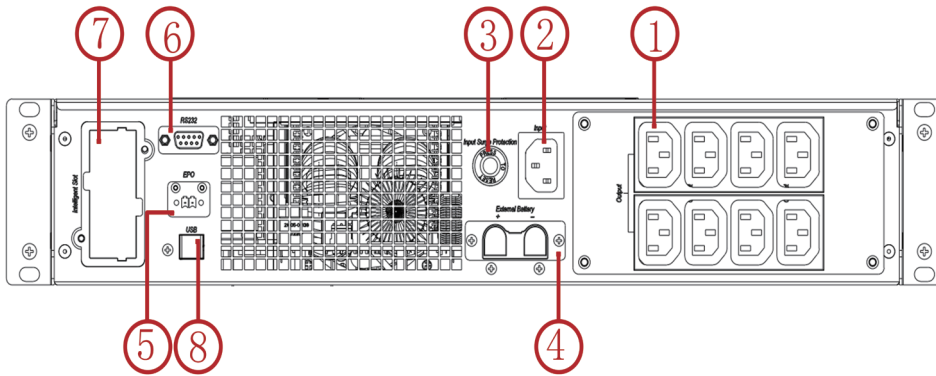
LCD interface



IOT function

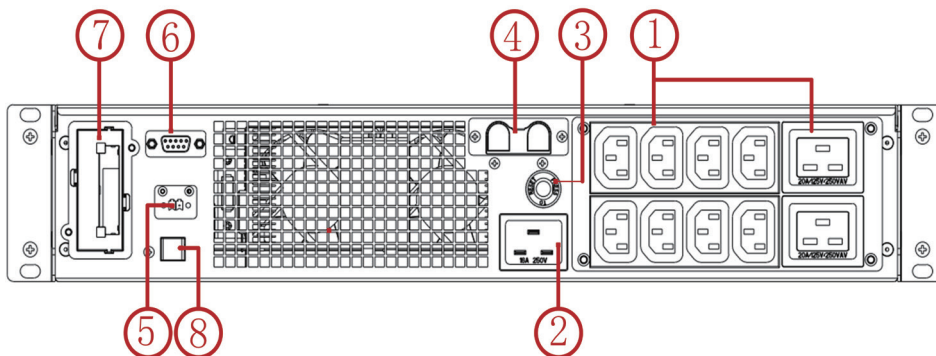
Rear Panel

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



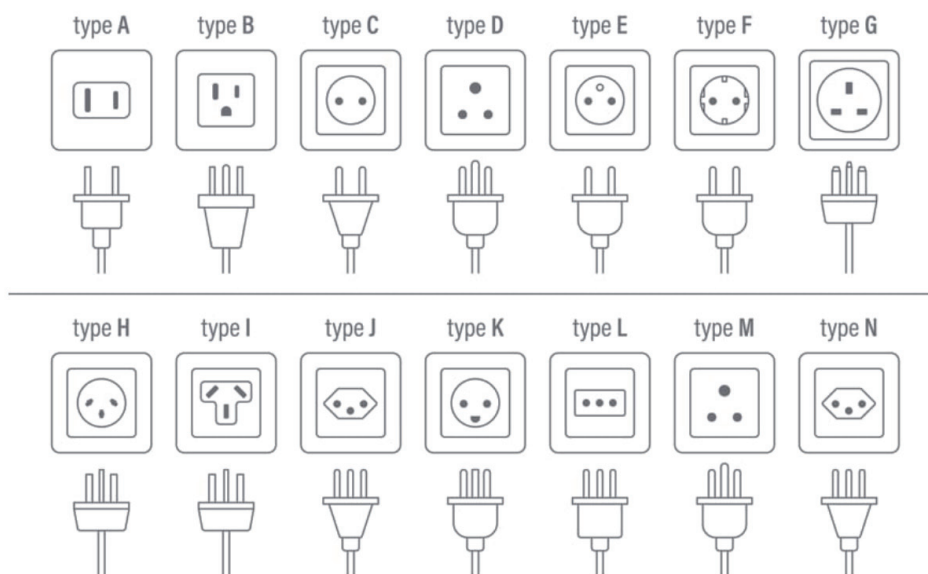
- 1.Output Socket
- 2.Main Input Socket
- 3.Surge Protector
- 4.External Battery Port
- 5.EPO Dry Contact
- 6.RS232 Port
- 7.Intelligent Slot
- 8.USB Port

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

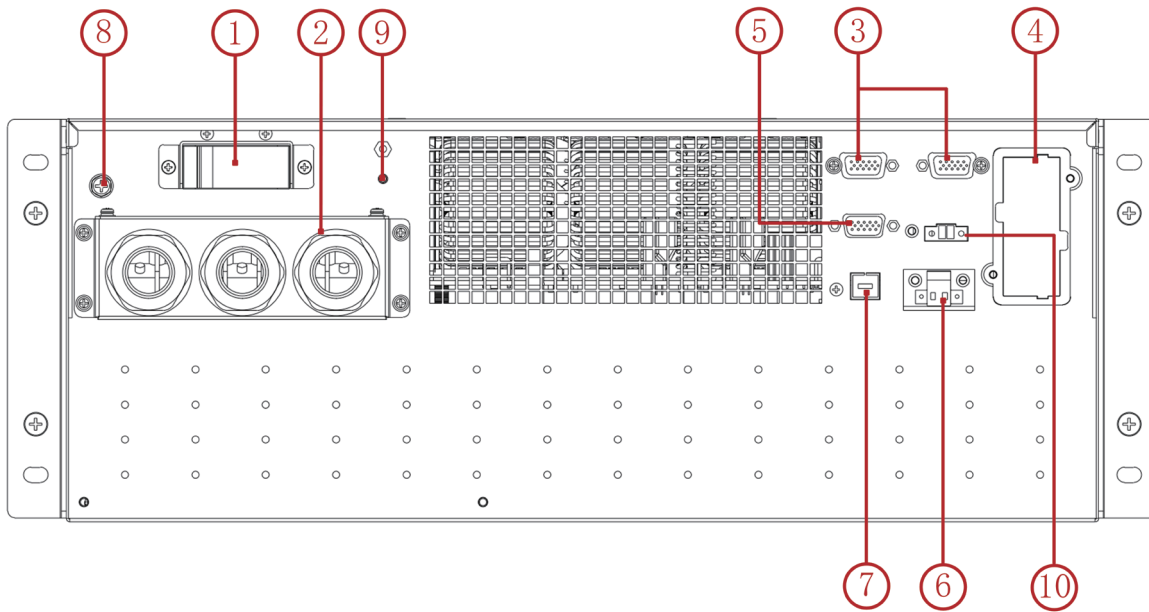


- 1.Output Socket
- 2.Main Input Socket
- 3.Surge Protector
- 4.External Battery Port
- 5.EPO Dry Contact
- 6.RS232 Port
- 7.Intelligent Slot
- 8.USB Port

Output sockets(OPTIONAL)

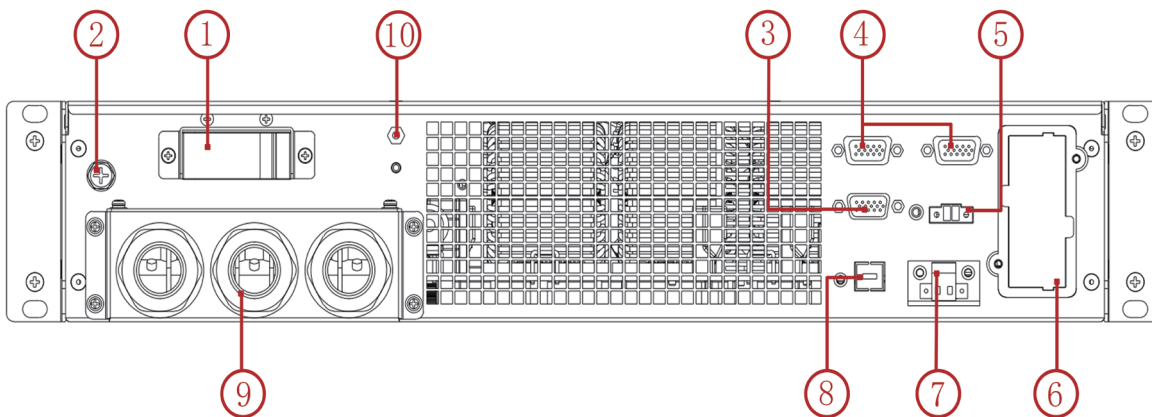


RM11-6KVA-B / RM11-10KVA-B

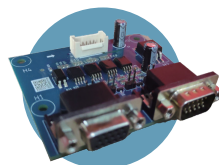


- | | |
|---------------------|-----------------------|
| 1. Bypass Breaker | 6. RS485 Port |
| 2. Wiring Terminal | 7. USB Slot |
| 3. Parallel Port | 8. Grounding Terminal |
| 4. Intelligent Slot | 9. Cold start |
| 5. RS232 Port | 10. EPO Dry Contact |

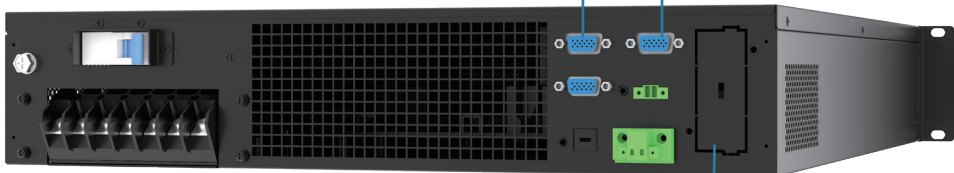
RM11-6KVA-L / RM11-10KVA-L



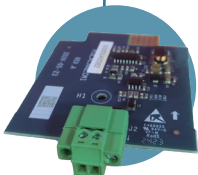
- | | |
|-----------------------|---------------------|
| 1. Bypass Breaker | 6. Intelligent Slot |
| 2. Grounding Terminal | 7. RS485 Port |
| 3. RS232 Port | 8. USB Port |
| 4. Parallel Slot | 9. Wiring Terminal |
| 5. EPO Dry Contact | 10. Cold Start |



Parallel card



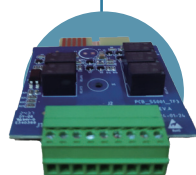
Intelligent Slot



RS485 card



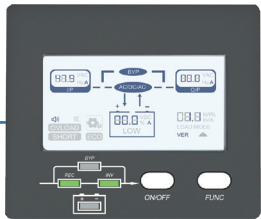
SNMP card



AS400 card



Holder



Standard screen



Color screen

(LCD can be rotated)

Specifications

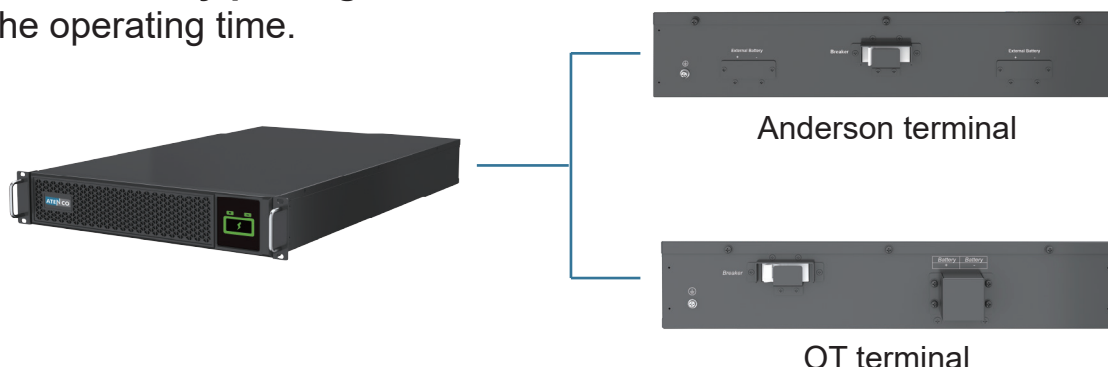
Model	RM11-1KVA-B	RM11-1KVA-L	RM11-2KVA-B	RM11-2KVA-L	RM11-3KVA-B	RM11-3KVA-L
Rate Power	1kVA/1kW	1kVA/1kW	2kVA/2kW	2kVA/2kW	3kVA/3kW	3kVA/3kW
Cold start	Default output 50/60Hz					
Input voltage range	110~300VAC;100% load@176VAC~276VAC, 100%~50% power derating@110VAC~176VAC, 50% load@276VAC~300VAC					
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*172 440*580*86
Weight(kg)		62.5	16	63 18

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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	

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- 3.Remark :RC08048A; "08"means battery number inside the Rack;
"048"means the battery system voltage, "RC"means Rack Cabinet



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Solutions behind the power

TM11 Series Online UPS

1:1



- 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 TM11 series is Atenco's online single-phase UPS series, which includes tower 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.

The 6kVA and 10kVA UPS models can be equipped with an optional built-in **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

TM11 Series

Performance

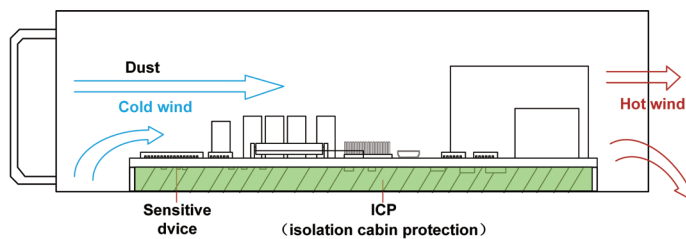
The temperature of key components is lower than 100% when running at full load.

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

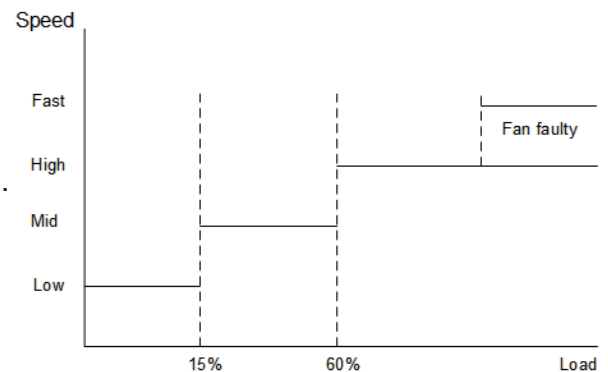
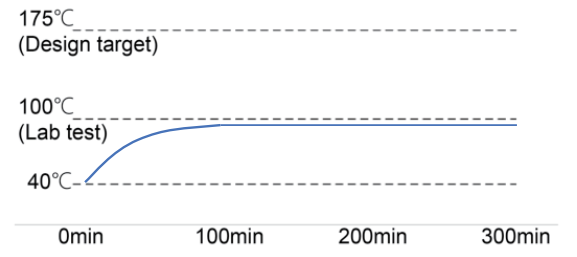
All dust-sensitive devices are placed in **ICP**, which are completely independent and dust-free, effectively improving reliability in harsh environments.

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

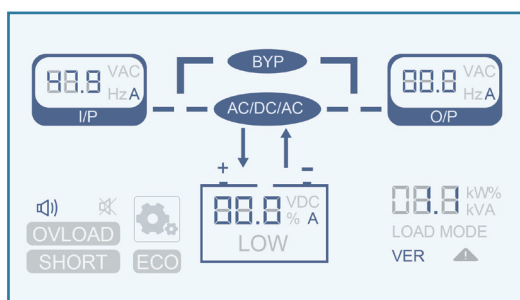
Automatically detect machine load rate and adjust fan speed according to key equipment temperature.



Full load temperature change curve



Configuration



LCD interface

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.

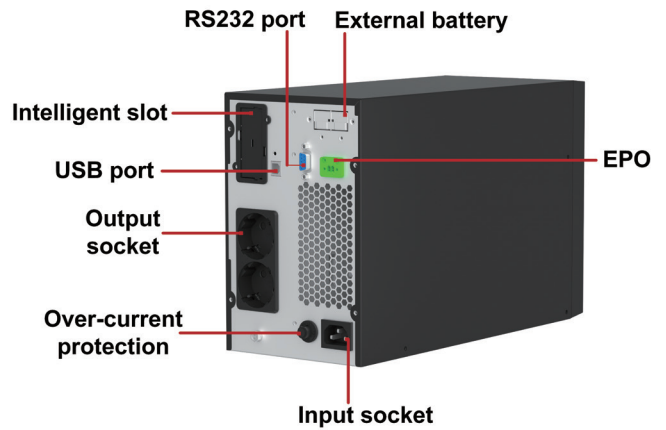
Output 208/220/230/240 Vac, 50 / 60Hz voltage, configurable from display



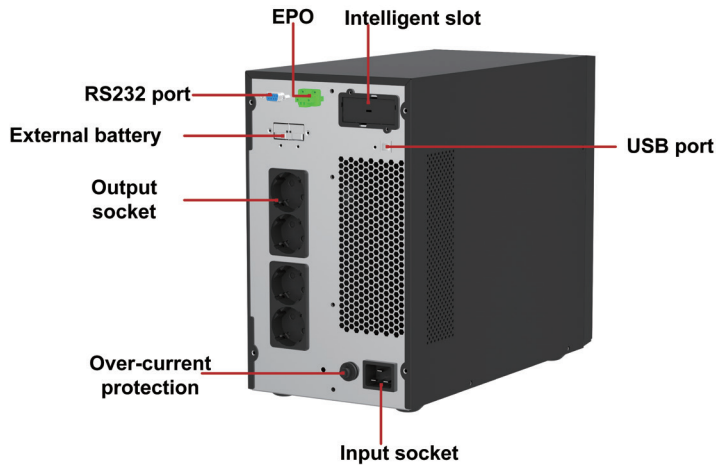
IoT function

TM11 Series

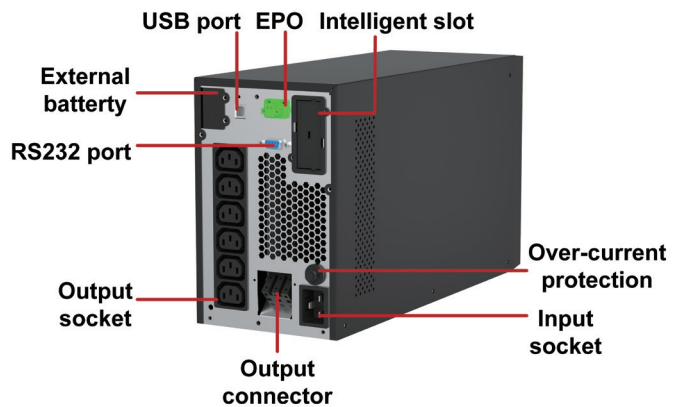
TM11-1KVA-B / TM11-1.5KVA-B / TM11-1KVA-L



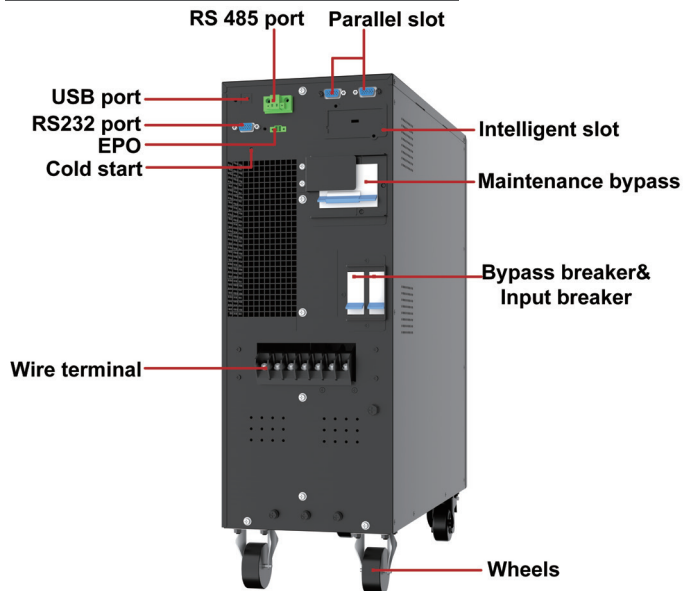
TM11-2KVA-B / TM11-3KVA-B



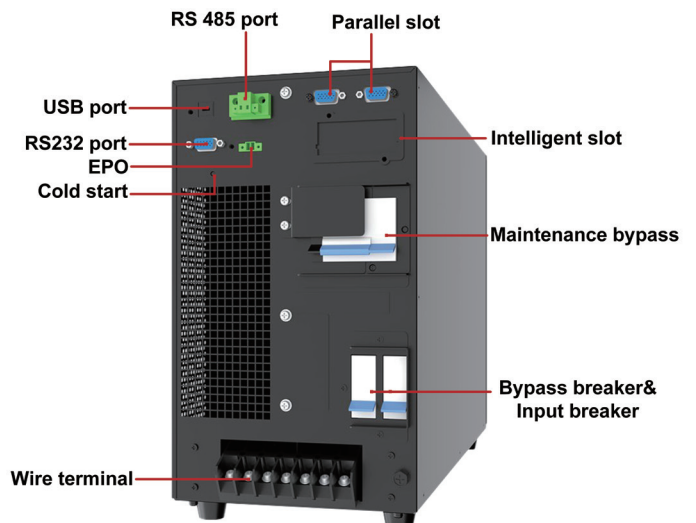
TM11-2KVA-L / TM11-3KVA-L



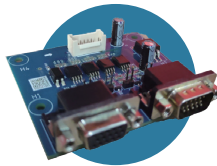
TM11-6KVA-B / TM11-10KVA-B



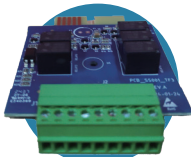
TM11-6KVA-L / TM11-10KVA-L



Accessories



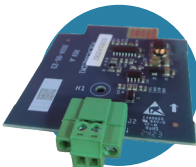
Parallel card



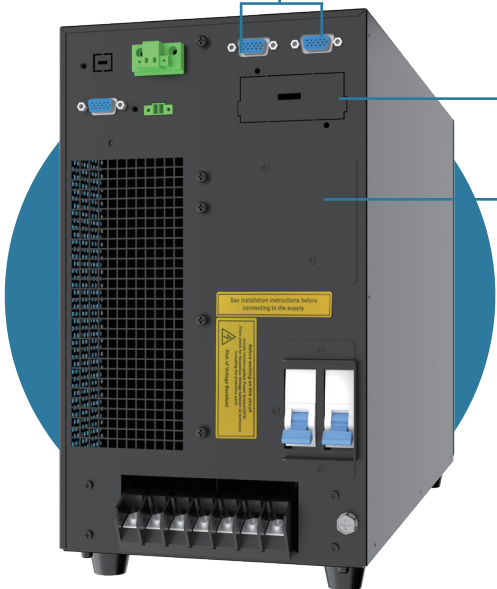
AS400 card



SNMP card



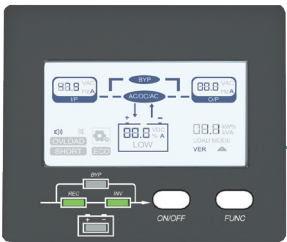
RS485 card



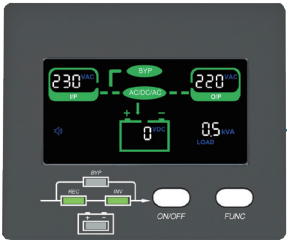
Intelligent Slot



Manual bypass



Standard screen



Color screen



Specifications

Model	TM11-1KVA-B	TM11-1.5KVA-B	TM11-1KVA-L	TM11-2KVA-B	TM11-2KVA-L	TM11-3KVA-B	TM11-3KVA-L	
Rate Power	1kVA/1kW	1.5kVA/1.5kW	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%)						
	Recovery time	≤40ms (0% - 100% -0%)						
	Output THDu	≤2% , Linear load ; ≤ 5% non-linear load according to IEC62040-3						
Transfer time	Main to BAT	0						
	INV to BYP	4ms						
Crest factor	3:1							
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)	3(12VDC*9Ah)	Depend on external battery	4(12VDC*9Ah) 6(12VDC*7/9Ah)	Depend on external battery	6(12VDC*9Ah) 8(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	24/36VDC	24/36VDC	48/72VDC		72/96VDC	
Standard	EPO, RS232							
Option	SNMP card, AS400, USB, RS485, Air filter							
Dimension ,W*D*H(mm)	144*355*226			190*400*328	144*398*223	190*400*328	144*398*223	
Weight (kg)	10.5		4.5	20.5	6	25	6	

Model	TM11-6KVA-B	TM11-6KVA-L	TM11-10KVA-B	TM11-10KVA-L
Rate Power	6kVA/6kW	6kVA/6kW	10kVA/10kW	10kVA/10kW
Cold start	Default output 50/60Hz			
Input voltage range	110~288VAC (220/230/240VAC); 176VAC~288VAC,full load;176~110 VAC ,power derate from 100% to 50%			
Input power factor	≥0.99			
Frequency range	40-70Hz			
Output frequency	50/60Hz, self adaption			
Output power factor	1			
Rate output	220/230/240VAC			
Load regulation	±1%			
Output THDu	≤1%THD, linear load; ≤5%THD, non-linear load			
Transfer time-main to BAT	0ms			
Transfer time-INV to BYP	0ms			
Efficiency-normal mode	Max 95%			
Efficiency-ECO mode	98%			
Noise (1 meter)	58dB			
Overload (normal mode)	110%:10mins;125%:1min;150%: 30 seconds			
Model	12VDC/7Ah	External, 16-24 setttable	12VDC/9Ah	External, 16-24 setttable
Quantity	16		16	
Max charging	1A	5A	1A	5A
Rate voltage	Default 192VDC, setttable			
Crest	3:1			
Display	LED+LCD			
Standard	RS232, EPO, RS485			
Option	AS400, SNMP card, Parallel kit, Maintenance bypass kit, 12A charger, Air filter			
Dimension, W*D*H (mm)	190*605*550	190*605*338	190*605*550	190*605*338
Weight (kg)	56	14	60	16

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Tower Battery Pack Specifications

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



Tower battery pack

Model	TC16192A		TC20240A	
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	190*494*338			
Net weight	43.9kg		53.7kg	

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- 3.Remark :Remark :TC16192A "16"means battery number inside the cabinet;
"192"means the battery system voltage, "TC"means Tower Cabinet



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