

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

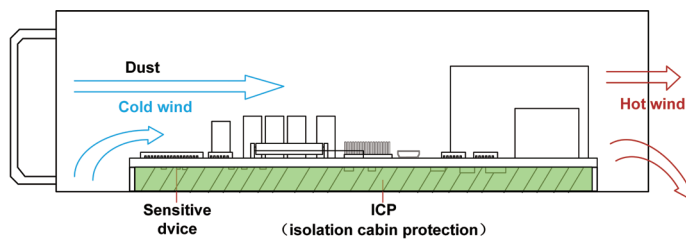
The temperature of key components is lower than 100% when running at full load.

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

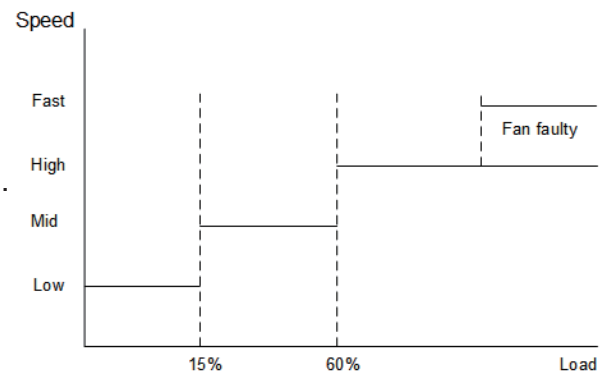
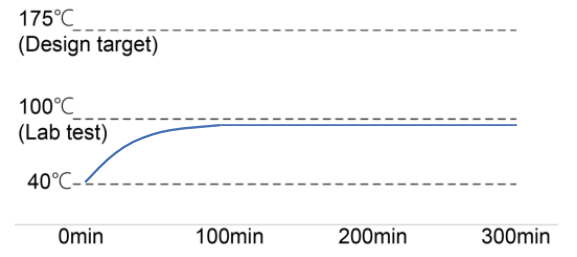
All dust-sensitive devices are placed in **ICP**, which are completely independent and dust-free, effectively improving reliability in harsh environments.

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

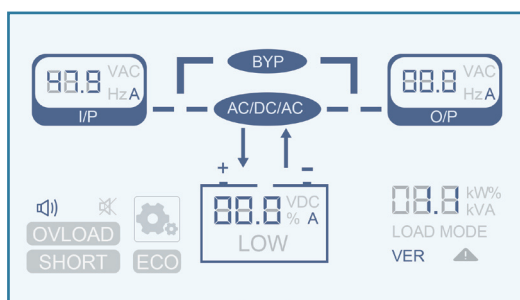
Automatically detect machine load rate and adjust fan speed according to key equipment temperature.



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.

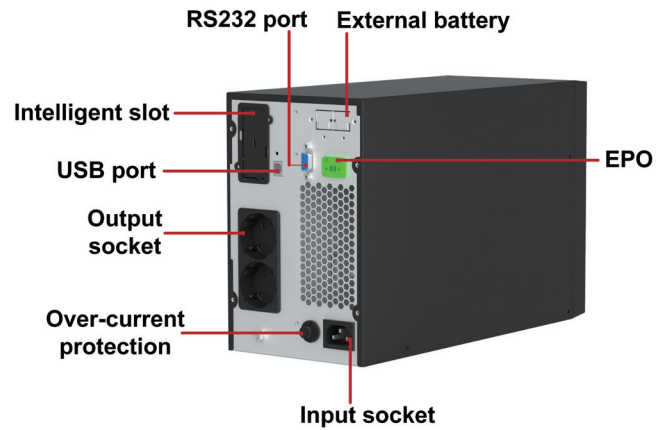
Output 208/220/230/240 Vac, 50 / 60Hz voltage, configurable from display



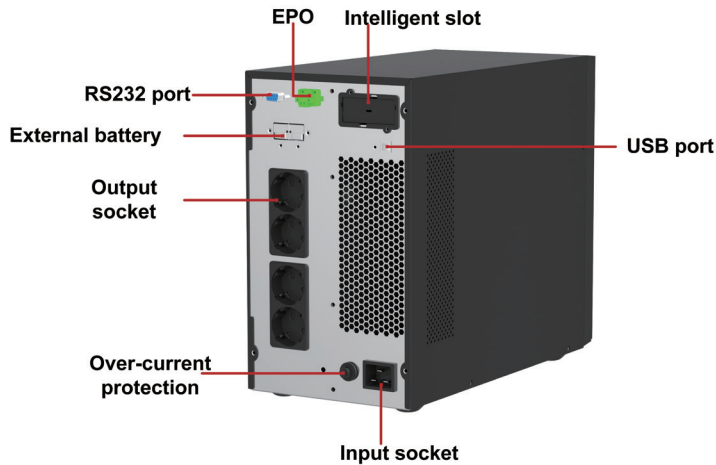
IoT function

TM11 Series

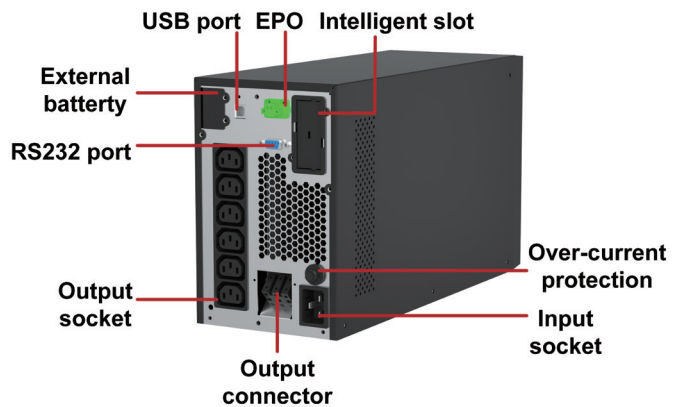
TM11-1KVA-B / TM11-1.5KVA-B / TM11-1KVA-L



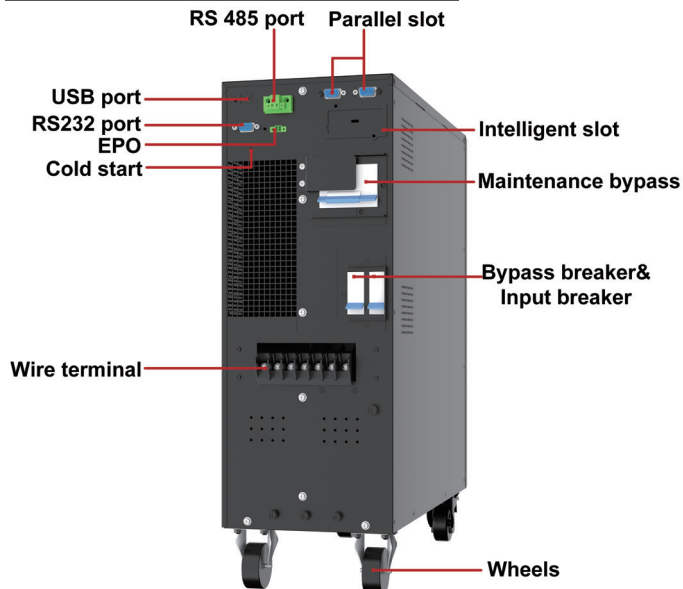
TM11-2KVA-B / TM11-3KVA-B



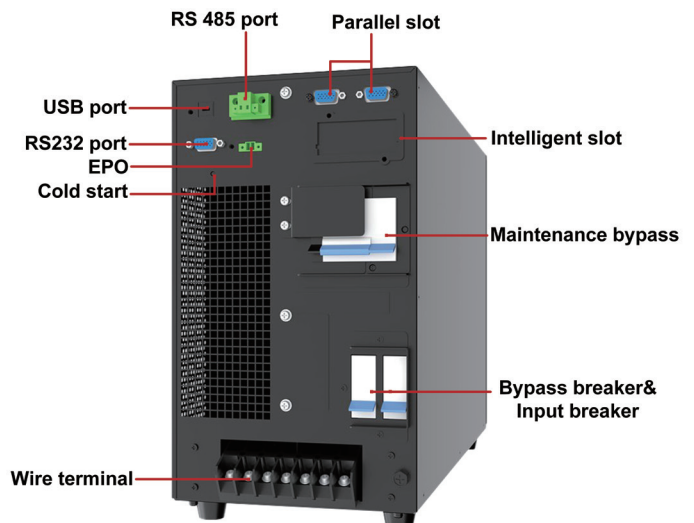
TM11-2KVA-L / TM11-3KVA-L



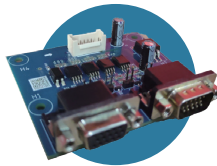
TM11-6KVA-B / TM11-10KVA-B



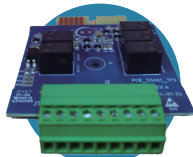
TM11-6KVA-L / TM11-10KVA-L



Accessories



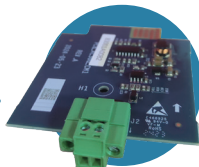
Parallel card



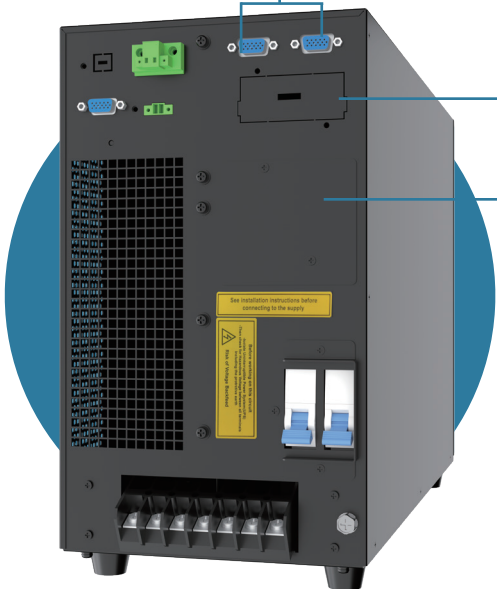
AS400 card



SNMP card



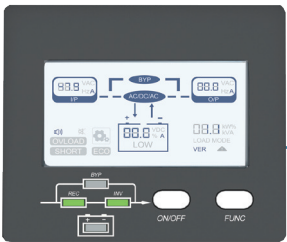
RS485 card



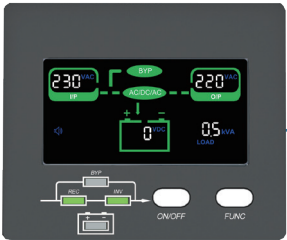
Intelligent Slot



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

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.

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	

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



2F.-7 No.14, Xiwei St., Sanchong Dist., New Taipei City 24155, Taiwan

TEL +886-2-2280-6939 **FAX** +886-2-2280-2939 info@atenco.com.tw www.atenco.com.tw

