

# Modular three-phase UPS Serie ATP-RM

25-600 kVA  
(380 V / 400V / 415 V)



ATP-RM series modular UPS provides the most compact footprint of less than 2m<sup>2</sup>, with maximum capacity of 900kVA. With the best reliability and high performance, it remains a market leader.

ATP-RM series is considered to be the best power protection solution for large data centers, as well as for sensitive electronics.

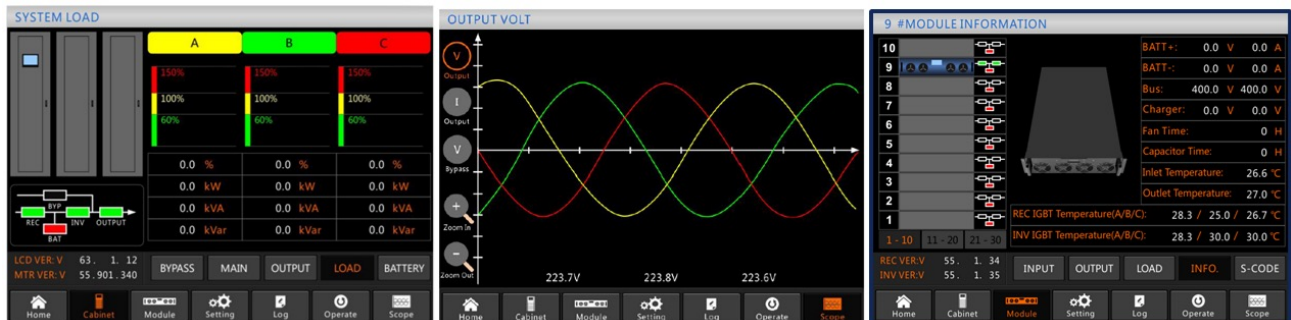
## Independent LCD for Each Power Module

Each power module has an independent LCD, gives users 'direct overview of status data and alarms in real time.



## Friendly Interface

Provide graphical and text based information of alarms, status data, instructions that users can have more friendly and safer operation.



## Setting of battery type

Parameters for operation with VRLA batteries

Battery Type	VRLA		DATE & TIME
Battery Number	40	---	LANGUAGE
Battery Capacity	100	AH	COMM.
Float Charge Voltage/Cell	2.25	V	USER
Boost Charge Voltage/Cell	2.30	V	BATTERY
EOD Voltage/Cell, @ 0.6C Current	1.65	V	SERVICE
EOD Voltage/Cell, @ 0.15C Current	1.75	V	RATE
PM Charge Current Percent Limit	5	%	CONFIGURE
Battery Temperature Compensate	3.0	mV/°C	
Boost Charge Time Limit	12	Hour	
Auto Boost Period	2160	Hour	
Auto Maintenance Discharge Period	720	Hour	
Reserved	8	A	
Please Confirm Settings <input checked="" type="checkbox"/>			

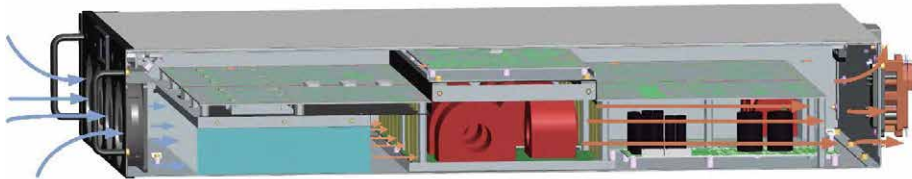
Parameters for operation with Lithium batteries

Battery Type	Lithium		DATE & TIME
Battery Number	150	---	LANGUAGE
Battery Capacity	100	AH	COMM.
Float Charge Voltage/Cell	3.45	V	USER
Boost Charge Voltage/Cell	3.45	V	BATTERY
EOD Voltage/Cell, @ 0.6C Current	2.65	V	SERVICE
EOD Voltage/Cell, @ 0.15C Current	2.7	V	RATE
PM Charge Current Percent Limit	10	%	CONFIGURE
Battery Temperature Compensate	3.0	mV/°C	
Boost Charge Time Limit	12	Hour	
Auto Boost Period	2160	Hour	
Auto Maintenance Discharge Period	720	Hour	
Reserved	0	---	
Please Confirm Settings <input checked="" type="checkbox"/>			

## Isolated Air Flow

The dedicated and redundant hot-swappable power modules take the most unique structure design. In this design, the PCB boards and heat-sinkers are in two completely different layers, which allow the UPS run in dusty environments, significantly improving its stability and environmental adaptability.

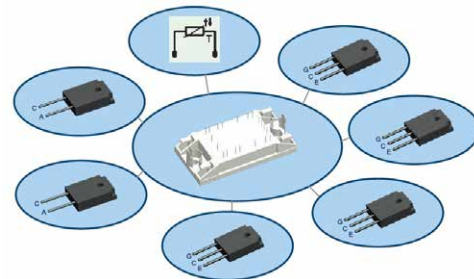
- Cooling air flows in the lower layer, keeping the upper PCB free of dust.
- One air flow channel ensures fans redundancy, even one fan fails, power module can run normally.



## Unique design for high reliability

Instead of discrete IGBT and SCR components, ATP-RM series UPS uses modular IGBT and SCR in Rectifier and Inverter, bringing in extremely high reliability.

- All components in one module, less fault points, higher reliability.
- All components integrated as one modular design, smaller disparity.
- Less space needed, UPS with compact design and higher power design.



## High density, modular scalable



- High power density, footprint for 200kVA is 0.66m<sup>2</sup>, power density 240kW/m<sup>2</sup>, saving valuable data center space.
- Scalable from 20kVA to 600kVA, max 30 power modules in parallel.
- Inherently N+X redundant.
- Hot-swappable power module and bypass & monitoring module.
- Additional charging module, extra charging current 50A × N for long time back up application.

Hot swappable power module and bypass & monitoring module

Additional charging module, extra charging current 50A×N for long time back up application



## Comprehensive Monitoring Management

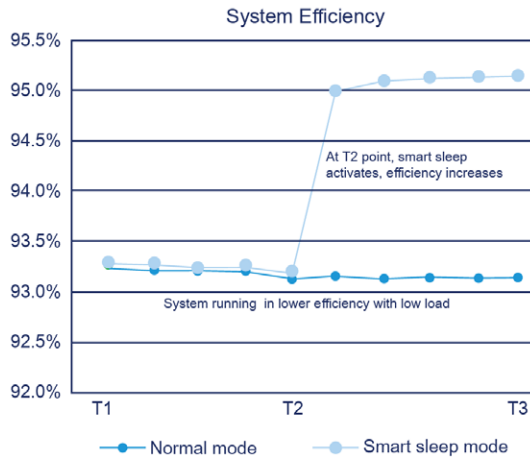
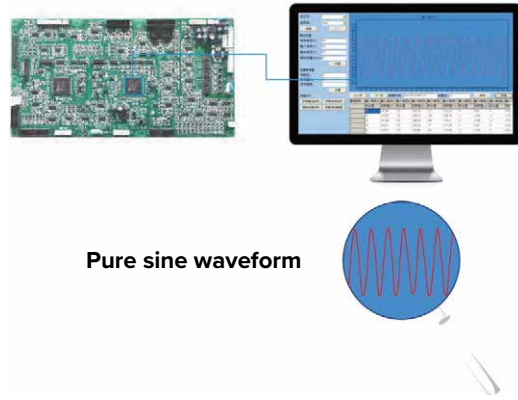
In each power module, information of critical components is monitored and displayed in real time, giving customers a view of inner status of the system and providing reminder information for maintenance.

- Maintenance reminder, running time of capacitors and fans displayed and recorded.
- Comprehensive temperature monitoring for thermal abnormal detection.
- Intelligent battery charger for long battery life.



### Critical Waveform Recording

- UPS can record and save the data of the main parameters automatically when faults happen for further analysis.
- Can record data information and present as waveform for further analysis.
- Can easily spot the causes of the failures, avoid future similar faults.



### Smart Sleep

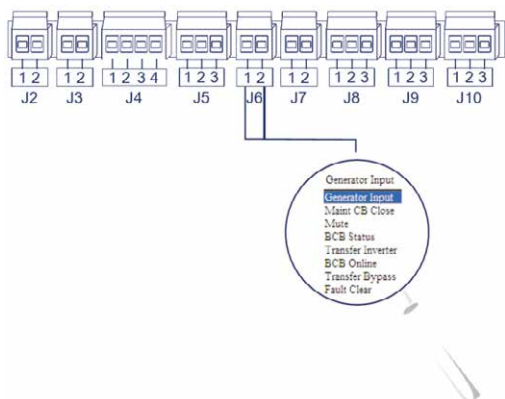
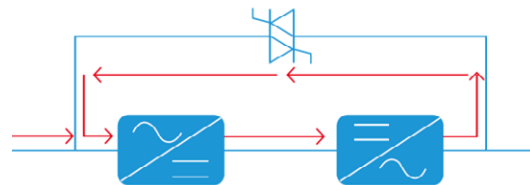
Smart Sleep function can intelligently make some power modules go to sleep when load is relatively low, improving the efficiency of the remaining power modules and saving customers on power and cooling costs.

- Improving efficiency, reducing power and cooling costs.
- Easy setting with just two steps. Customers can select sleep mode and rotation period.
- Power modules working in rotation, prolong the life time.

### Self-aging

Self-aging is an advanced function applied in all three phase UPS, Self-aging function can test UPS under different load situation without real load, saving more than 90% of energy.

- Simulate different load conditions without connecting to any real load, saving 90% of energy.
- On site setting supported, easy for factory testing.



### Programmable Dry Contacts

Programmable dry contacts are available in all RM and HT33 series UPS. Customers can easily expand or modify the definition of each port.

Abundant options with three input and four outputs, all programmable

Easy setting, just pull the drop-down menu and set.



## Technical specifications

MODEL	ATPRM600/30X		ATPRM300/30X		ATPRM180/30X		ATPRM500/25X		ATPRM250/25X		ATPRM150/25X	
System Capacity	600kVA		300kVA		180kVA		500kVA		250kVA		150kVA	
Power Module Capacity	30kVA/30kW				25kVA/25kW							
Input	Dual Input	Optional										
	Phase	3 Phase+Neutral+Ground, 380V/400V/415V(line-line)										
	Input Voltage Range	304~478Vac (line-line),full load; 228V~304Vac (line-line),load decreases linearly according to the min phase voltage										
	Rate Frequency	50/60Hz										
	Input Frequency Range	40Hz~70Hz										
	Input PF	>0.99										
Bypass	Input THDi	<3% (100% Linear load)										
	Rate Voltage	380/400/415Vac (line-line)										
	Rate Frequency	50/60Hz										
	Input Voltage Range	Settable, -40% ~ +25%										
	Bypass Frequency Range	Settable, ±1Hz, ±3Hz, ±5Hz										
Output	Bypass Overload	125% long term operation; 130% for 10 mins; 150% for 1 min										
	Rate Voltage	380/400/415Vac (line-line)										
	Voltage Regulation	1% for balance load; 1.5% for unbalance load										
	Rate Frequency	50/60Hz										
	Frequency Precision	0.1%										
	Output PF	1										
	Output THDu	<1% , Linear load; <5.5%, Non-linear load										
	Crest Factor	3:1										
VRLA Battery	Inverter Overload	110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms										
	Voltage VRLA	±240 V CC										
	Battery Number	40pcs (Settable: even number from 32 to 44)										
	Voltage Precision	±1%										
	Charge Power	up to 20% * Output active power										
LiFePO4 Battery	Battery Cold Start	Standard										
	Voltage LFPB	±240Vdc										
	Number of 3.2V lithium cells	150pcs (Settable: even number from 140 to 180)										
System	Voltage Precision	±1%										
	Charge Power	up to 20% * Output active power										
	Efficiency	AC Mode	95.0%									
		ECO Mode	99.0%									
		Battery Mode	95.0%									
	Display	10.4" color touch screen LCD + LED + keyboard										
	IP Class	IP20										
	Interface	RS232,RS485, Programmable Dry Contact, USB										
	Option	SNMP Card, Parallel kit, SPD, LBS, Dust filter, Expansion dry contact card										
	Temperature	Operation: 0 ~ 40 °C Storage: -40 ~ 70 °C										
Relative humidity	0 ~ 95% Non-condensing											
Altitude	<1000m. Within 1000m to 2000m, 1% power derating for every 100m rise											
Noise (1 meter)	72dB@100%load	65dB@100%load			72dB@100%load			65dB@100%load				
	65dB@45%load	62dB@45%load			65dB@45%load			62dB@45%load				
Applicable Standards	Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3											
Physical	Weight (kg)	Cabinet	660	242	178	660	242	178				
		Module	32.3									
	Dimension W*D*H (mm)	Cabinet	2000*1050*2000	600*1100*2000	600*1100*1600	2000*1050*2000	600*1100*2000	600*1100*1600				
Module		460*790*134										

