Modular Online Three-phase UPS

ATP-RML Series

Power: 15- 400KVA
Input voltage: 208Vac
Output voltage: 208 Vac

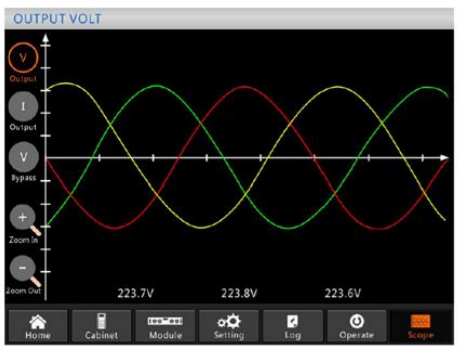
ATP-RML series modular UPS provides the most compact footprint of less than 2㎡ with maximum capacity of 400kVA.With best reliability and high performance, it has been leading the domestic market for years.
ATP-RML series is considered to be the best power protection solution for large data centers, as well as for sensitive electronics.

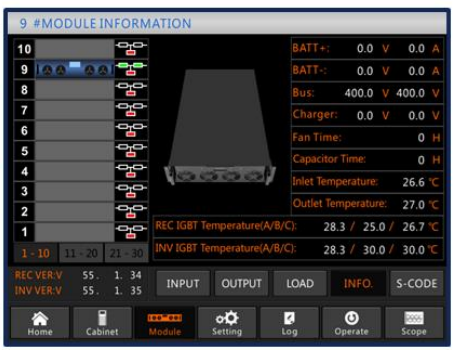
Independent LCD for Each Power Module

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.



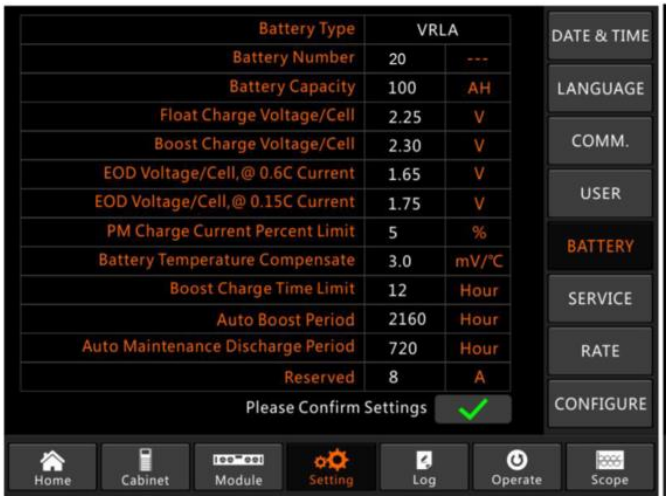


Operation with LiFePO4 Lithium battery bank

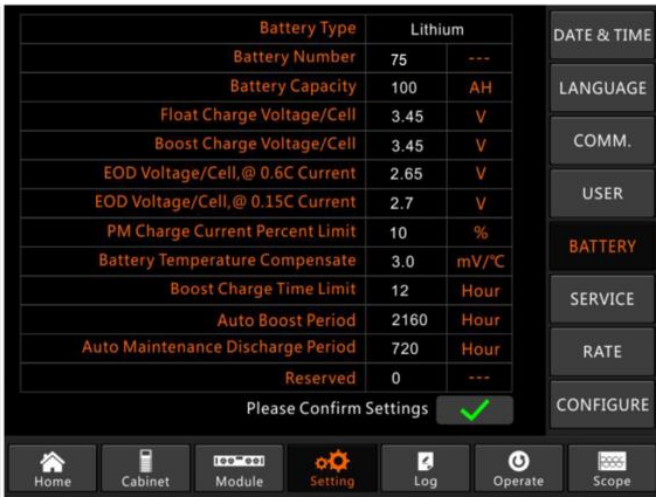
This lithium battery system consists of battery racks and CBMS, GBMS; every battery rack integrates with intelligent BMU inside. And this system has big advantages on safety, cycle life, energy density, fast charging, temperature range and environmental protection. is committed to providing safe and stable power supply for UPS system.

Setting of battery type

Parameters for operation with VRLA batteries



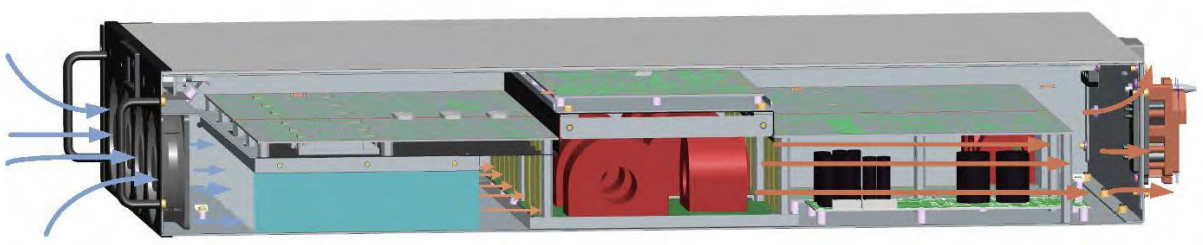
Parameters for operation with Lithium batteries



Isolated Air Flow

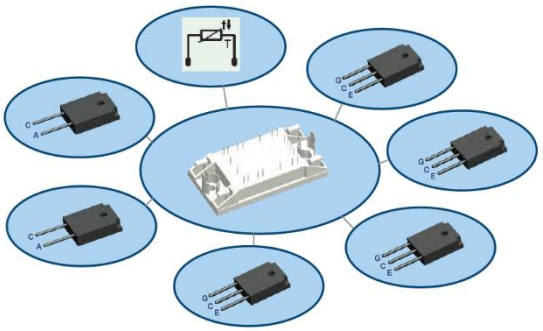
The dedicated and redundant hot-swappable power modules take the most unique structure design. In this design, the PCB boards and heat-sinkers are in two completely different layers, which allow the UPS run in dusty environments, significantly improving its stability and environmental adaptability.

- 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.
- Integrated inner thermal sensors display IGBT inner temperature directly.

High density, modular scalable

The Modular Online UPS (208V&120V) is high reliability and adaptability product for medium and large data center. It can be scaled from 20kVA to 600kVA, with 30 power modules in parallel.

Three units in parallel

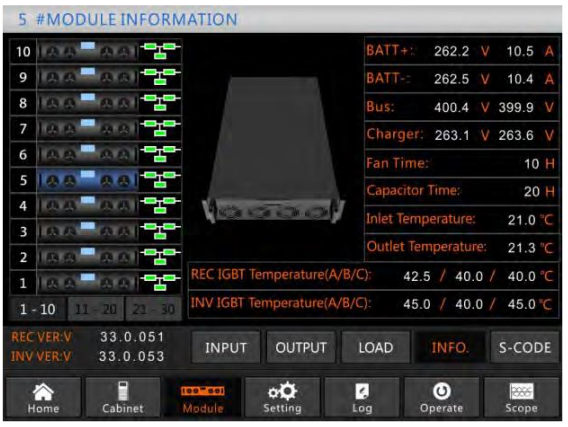
- Hot swappable power module and bypass & monitoring module
- Additional charging module, extra charging current 50A×N for long time back up application

Bypass & Monitoring module

Power module

Comprehensive Monitoring Management

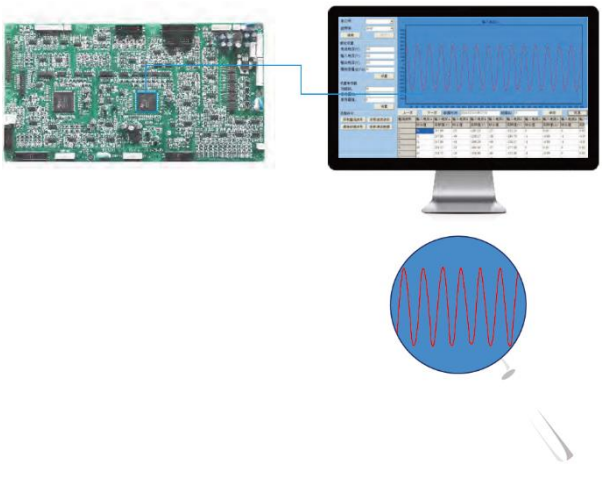
In each power module, information of critical components is monitored and displayed in real time, giving customers a view of inner status of the system and providing reminder information for maintenance.



- 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

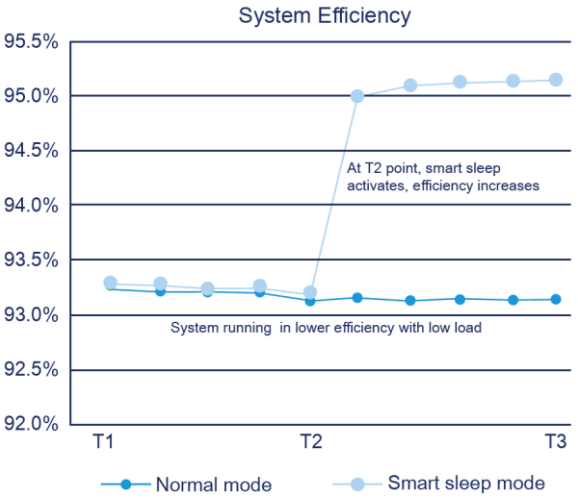
- UPS can record and save the data of the main parameters automatically when faults happen for further analysis.
- Can record data information and present as waveform for further analysis.



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.

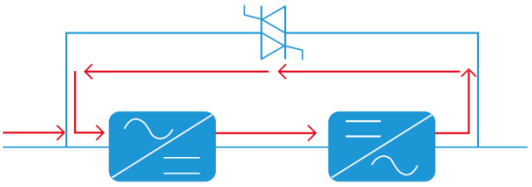
- Improving efficiency, reducing power and cooling costs.
- Easy setting with just two steps. Customers can select sleep mode and rotation period.
- Power modules working in rotation, prolong the life time.



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.

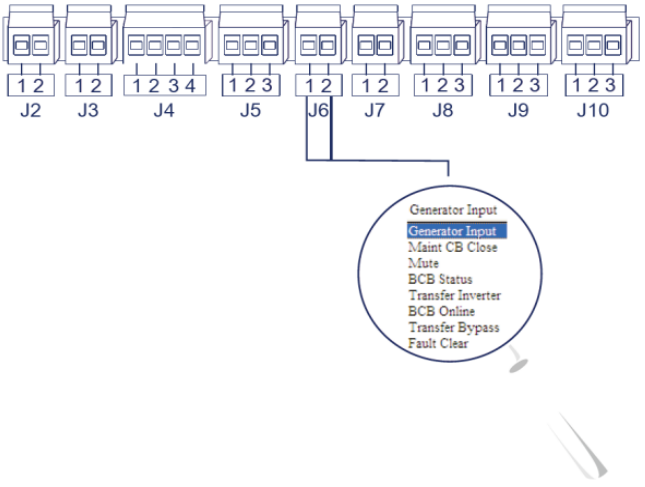


Programmable Dry Contacts

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 inputs and four outputs, all programmable

Easy setting, just pull the drop-down menu and set Compatible with all the RM and HT33



Technical specifications

MODEL			ATPRML 400/20X	ATPRML 200/20X	ATPRML 120/20X	ATPRML 300/15X	ATPRML 150/15X	ATPRML 90/15X
System Capacity			400kVA	200kVA	120kVA	300kVA	150kVA	90kVA
Power Module Capacity			20kVA/16kW			15kVA/15kW		
Input	Dual Input		Optional					
	Phase		3 Phase + Neutral + Ground, 200V/208V/220V (line-line)					
	Input Voltage Range		166-261Vac (line-line), full load; 166-125Vac (line-line), load derated from 100%-75% linearly					
	Rate Frequency		50/60Hz					
	Input Frequency Range		40Hz～70Hz					
	Input PF		>0.99					
	Input THDi		THDi <3%（100% Linear load）					
Bypass	Rate Voltage		3 Phase + Neutral + Ground, 200V/208V/220V (line-line)					
	Rate Frequency		50/60Hz					
	Input Voltage Range		Settable, -40%～+25%					
	Bypass Frequency Range		Settable, ±1Hz, ±3Hz, ±5Hz					
	Bypass Overload		125% long term operation; 130% for 10 mins; 150% for 1 min					
Output	Rate Voltage		3 Phase + Neutral + Ground, 200V/208V/220V (line-line)					
	Voltage Regulation		1% for balance load; 1.5% for unbalance load					
	Rate Frequency		50/60Hz					
	Frequency Precision		0.1%					
	Output PF		0.8			1		
	Output THDu		<1% , Linear load; <5.5%, Non-linear load					
	Crest Factor		3:1					
	Inverter Overload		110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms					
VRLA Battery	Voltage VRLA		±120Vdc					
	Battery Number		20pcs					
	Voltage Precision		±1%					
	Charge Power		up to 20% * Output active power					
	Battery Cold Start		Standard					
Lithium LiFePO4 Battery	Number of 3.2V lithium cells		(Settable: even number from 70 to 100)					
	Cell Float Charging Volt		3.3~4.15 (depend on battery)					
	Cell Equal Charging Voltage		3.3~4.15(depend on battery)					
	EOD Voltage 0.6c		2.6~2.8 (depend on battery)					
	EOD Voltage 0.15c		2.65~2.85 (depend on battery)					
	Charging Current Limit %		1~20(depend on battery)					
	Battery Cold Start		Standard					
System	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 ℃ Storage: -40～70 ℃					
	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@45%load	65dB@100%load 62dB@45%load		72dB@100%load 65dB@45%load	65dB@100%load 62dB@45%load	
Physical	Weight (kg)	Cabinet	660	220	165	660	220	165
		Module	34			32		
	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					