

ATP480

Power: 40- 400KVA
Voltage: 480Vac



The Atlantic Power Series Modular Online UPS ranging from 40kVA to 400kVA is designed to protect any critical loads for medium and large data center achieving maximum availability. The ATP480 series feature the latest technology of 3-level technology and PFC input control, which guarantees high efficiency of 96% and ultra-reliability. Its compact design ensures power density of 400kVA in one cabinet, 3 units can be paralleled for capacity or redundancy up to 1200kVA, making it an excellent choice for medium and large facilities.

ATP 480 Features



Compact design

400kVA in one cabinet, footprint less than 1.45m², saving valuable room space.

High power density

40kVA power module in 4 U height, easy for capacity expansion.

High efficiency

Advanced 3-level technology guarantees high efficiency operating in double conversion mode up to 96%.

Intelligent charging management

The system intelligently controls the whole process of the charging and discharging effectively improve the life time of the battery.

High scalability

The system can be configured from 40kVA to 400kVA in one single cabinet, 3 units in parallel for a capacity up to 1200Kva.

Friendly HMI

10.4" touch color LCD with graphic display, independent LCD for each power module.

Smart sleep function

System can intelligently shutdown some power modules to increase total load rate, achieving higher efficiency.

Multi communication interface

Provide RS232, RS485, USB, SNMP, AS400 and programmable dry contacts.

Main components

Maintenance bypass.

Static bypass module and communication interface.

On-line, power modules.



Friendly Interface



10.4" touch color LCD with graphic display
Provide graphical and text-based information of alarms, status data.
User can easily browse the information, operate the UPS, and set the parameters.



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. The operator control panel is divided into three functional areas: Status indicator, control and operation keys and LCD display

Operation with VRLA batteries or LFPB lithium batteries

The ATP480 UPS can be easily configured to operate with VRLA batteries or LFPB lithium batteries.

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			✓

(a) The setting for VRLA

Parameters for operation with LFPB batteries

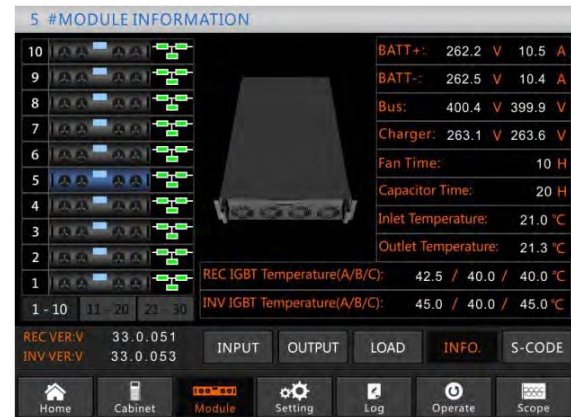
Battery Type	Lithium		DATE & TIME
Battery Number	150	---	LANGUAGE
Battery Capacity	100	AH	COMM.
Float Charge Voltage/Cell	3.45	V	USER
Boost Charge Voltage/Cell	3.45	V	BATTERY
EOD Voltage/Cell, @ 0.6C Current	2.65	V	SERVICE
EOD Voltage/Cell, @ 0.15C Current	2.7	V	RATE
PM Charge Current Percent Limit	10	%	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			✓

(b) The setting for Lithium (LFPB)

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.

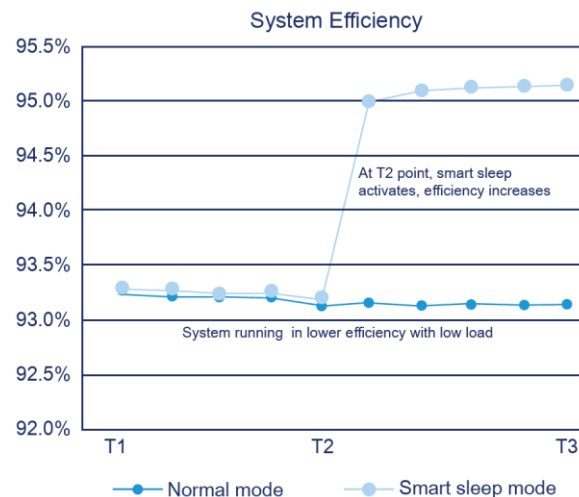
- Maintenance reminder, running time of capacitors and fans displayed and recorded.
- Comprehensive temperature monitoring for thermal abnormal detection.
- Intelligent battery charger for long battery life.



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.

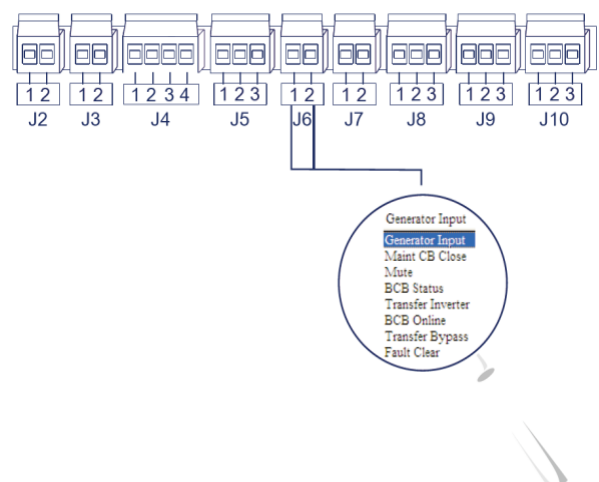
- Improving efficiency, reducing power and cooling costs.
- Easy setting with just two steps. Customers can select sleep mode and rotation period.
- Power modules working in rotation, prolong the life time.



Programmable Dry Contacts

Programmable dry contacts are available. Customers can easily expand or modify the definition of each port.

Several options with three inputs and four outputs, all programmable.



Technical specifications

Model			ATP 400/40X	ATP 320/40X	ATP 240/40X	ATP 160/40X	ATP 80/40X
System Capacity			400 kVA	320 kVA	240kVA	160 kVA	80 kVA
Power Module Capacity			40 kVA / 40 kW				
Input	Dual Input		Standard		Optional	Standard	
	Phase		3 Phase + Neutral + Ground, 480 (line-line)				
	Input Voltage Range		384~528 Vac (line-line), full load; 288V~384 Vac (line-line), load decreases linearly according to the min phase voltage				
	Rate Frequency		50/60 Hz				
	Input Frequency Range		40Hz~70 Hz				
	Input PF		> 0.99				
	Input THDi		< 3% (100% Linear Load)				
Bypass	Rate Voltage		480VAC (line-line)				
	Rated Frequency		50/60Hz				
	Input Voltage Range		Settable, -40% ~ +10%				
	Bypass Frequency Range		Settable, ±1Hz, ±3Hz, ±5Hz				
	Bypass Overload		110% long term operation 125% for 5 mins, 150% for 1 min > 150% for 1s			125% long term operation 130% for 10 mins, 150% for 1 min > 150% for 300ms	
Output	Rate Voltage		480VAC (line-line)				
	Voltage Regulation		1% for balance load; 1.5% for unbalanced 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				
	Inverter Overload		110% for 1 hour; 125% for 10 mins; 150% for 1 min; >150% for 200ms				
VRLA Battery	Voltage		±240VDC				
	Battery Number		40PCS				
	Voltage Precision		±1%				
	Charge Power		Up to 20% *Output active power				
	Battery Cold Start		Standard		Optional		
Lithium LFPB Battery	Number of 3.2V lithium cells		140~180				
	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)				
	Charge Power		Up to 20% *Output active power				
System	Efficiency		AC Mode: 96.0% ECO Mode: 99.0% Battery Mode: 95.0%				
	Display		10.4’’ touch screen LCD + LED + keyboard				
	IP Class		IP 20				
	Interface		RS232, RS485, Programmable Dry Contact, USB				
	Option		SNMP Card, Parallel kit, SPD, LBS, Dust filter				
	Temperature		Operation: 0 ~ 40°C Storage: -40 ~ 70°C				
	Relative Humidity		0 ~ 95°C Non-condensing				
	Altitude		<1000m. Within 1000m to 2000m, power derating 1% for every 100m rise				
	Noise (1 meter)		72dB @ 100% load, 69dB @ 45% load				
Applicable Standards			Safety: IEC/EN 62040-1-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3				
Physical	Weight (kg)	Cabinet	450	350	220	170	120
		Power Module	44				
	Dimension W*D*H(mm)	Cabinet	1300*1100*2000	1050-1100*2000	650*970*2000	650*960*1600	600*980*1150
		Power Module	510*700*178				

