



RAPTOR-6KRT/RAPTOR-10KRT

Overview

The high-quality online double-conversion UPS that offers the ideal power protection for heavily loaded equipment

Designed for office and data center applications, the RAPTOR Series adopts double-conversion topology to provide seamless Pure Sine Wave output. The products are compatible with generators to prolong power continuity. The UPSs also adopt ECO Mode to help save on energy costs, Smart Battery Management (SBM) to extend battery lifespan, and multifunction LCD readout to display precise information. The power management software allows users to easily control and monitor the UPS system.

Features

- N+X parallel redundancy, support maximum 4 units in parallel
- Online double conversion with full digital control
- Optimization battery group, the quantity of battery: 16/18/20pcs (Settable)
- Wide input voltage range: 110~286Vac
- Wide input frequency range
- Selectable output voltage: 208/220/230/240Vac
- Generator compatible
- ECO mode operation for energy saving
- Self-testing when UPS startup
- Multiple communication interface: RS232/USB/EPO (Relay card/SNMP card optional)
- Maximum charging current up to 10A
- Cold start
- Design with maintenance switch (Optional)
- Intelligent fan speed regulation
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and overdischarge, output low voltage and fan fault alarm

Application

Raptor 6~10kVA, Rack/Tower models application areas

- Data Network: Mid - range Servers (Windows and Linux), Wi-Fi Applications & Data networks
- Small Data Center Rooms
- Voice Networks: Cellular Sites, Voice Over IP (VOIP), Very small Aperture Terminals (VSAT) PBX And IT-enabled PBX Automation industries
- Process Automation Equipment: Programmable Logic Controllers (PLS) and Cash Machines (ATM)

Advanced protection for :

- Infrastructure
- Industrial and Medical IT
- Networking
- Storage
- Telecom

Angustos

Angustos was founded in 2000 and is now regarded as one of the foremost manufacturers of Uninterruptible Power Supply, IT equipments,...

For more than 20 years our customers have been convinced by our core competencies in extending, switching and distributing standardised computer signals.

We are committed to established international standards. We can provide customers with complete Datacenter & Power solutions as well as OEM/ODM services. We can cover even from medium to small business, factory & industrial, military & government, home office & personal use.



Online (Double Conversion) UPS Topology



Extended Battery Module (EBM)



Zero Transfer Time



Remote Management Capability



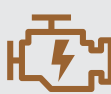
Smart Battery Management



UPS Parallel Expansion



ECO Mode



Generator Compatible

Model Name	RAPTOR-6KRT	RAPTOR-10KRT
Power Rating	6 kVA / 5.4 kW	10 kVA / 9 kW
GENERAL		
UPS Topology	Online Double Conversion	
ECO Technology	Online ECO Mode Efficiency > 96%	
Parallel Expansion	Max. Units up to 4	
Active PFC Compatibility	Yes	
INPUT		
Nominal Voltage	208/220/230/240Vac ±10%, Single Phase	
Input Voltage Range	110~286Vac	
Rated Input Current (A)	27.3A	45.5A
Power factor	≥0.99	
Frequency Range	40~70Hz (50/60Hz, 50±10Hz, 60±10Hz)	
Frequency Detection	Auto-sensing	
Input Connector type	Hardware Terminal Block	
OUTPUT		
Voltage	208/220/230/240Vac, Single Phase	
Voltage Regulation	±1%	
Output Voltage Setting	Configurable	
Output Frequency	(50 ± 0.1%, 60 ± 0.1%)Hz	
Power Factor	0.9	
Overload Protection	Internal Current Limiting, Circuit Breaker, Fuse	
Overload Protection (Line Mode)	105~125% Load for 10 min, 125~150% Load for 1 min, 150~170% Load for 10 sec, >170% Load for 1 sec	
Overload Protection (Battery Mode)	105~125% Load for 2 min, 125~150% Load for 30 sec, >150% Load for 1 sec	
Overload Protection (Bypass Mode)	125~150% Load for 1 min, 150~170% Load for 10 sec, >170% Load for 1 sec	
Harmonic distortion	THDv < 2% Linear load, THDv < 5% Non linear load	
Efficiency AC-AC	Up to 94%	
Output Connector type	Hardware Terminal Block	
BATTERY		
Voltage	240VDC	
Runtime@50% Load(min)	17	11.5
Runtime@100%Load(min)	6.5	5.0
Typical Recharging Time	6-7 hours	
Charging current (Max.)	10A (settable base on battery capacity)	
INDICATORS		
LED display	Battery mode, Line mode, Bypass mode, ECO mode, Battery low voltage, Overload & UPS fault	
LCD display	Input frequency, Input voltage, Output frequency, Output voltage, Load percentage, Battery voltage, Inner temperature & Remaining battery backup time	
Alarm	Battery mode : beeping every 4 seconds; Battery low : beeping every second; Overload : beeping twice every second; Fault : continuously beeping	
PHYSICAL & STANDARDS & ENVIRONMENT		
Dimension(WxDxH)/Weight	440 × 685 × 217.5 mm / 74kg (5U)	440 × 625 × 217.5mm / 76kg (5U)
SAFETY	IEC/EN 62040-1, IEC/EN 62477-1	
EMC	IEC/EN 62040-2 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2)	
Environment	Operating temperature : 0°C - 40°C; Storage temperature : -25°C~55°C; Humidity range : 20~95%RH @ 0~40°C (Non condensing) Altitude : < 1500m, derating required when >1500m; Noise level < 55dB @1 Meter with 6kVA & < 58dB @1 Meter with 10kVA	

1. When output voltage is 208Vac, need to derate to 80% of the unit capacity
 2. Specifications are subject to change without prior notice
 3. Data above are typical values for reference only, not as a basis for engineering design

Raptor Series 6-10kVA Rack/Tower Models Battery Pack Specification

Model Name	RAPTOR-BPSVN	RAPTOR-BPNNE
GENERAL		
Battery Type	VRLA (Lead acid maintenance free battery)	
Battery recharging time	6-8 hours (To 90% of full capacity)	
Typical battery life	3-5 years, depend on discharging cycle and ambient temperature	
System voltage	240VDC	
Battery quantity	1×20 PCS	
Capacity	7Ah x 12V	9Ah x 12V
PHYSICAL		
Dimension W×D×H	440×680×131mm (3U)	
Net weight	58kg	63kg
ENVIRONMENT		
Safety	CE	
Operating environment	0°C - 40°C	
Relative humidity	0~95% (Non condensing)	
Noise level	< 40dB at 1 Meter	

Note: Specifications are subject to change without prior notice

Runtime Table

	External Battery Pack Quantity	Runtime at different loads (mins) with RAPTOR-BPNNE			
		25%	50%	75%	100%
6kVA	0	40.1	17.0	9.0	6.5
	1	101.8	47.5	28.2	18.1
	2	152.0	70.5	42.1	27.2
	3	203.4	94.2	55.7	36.0
	4	253.2	117.3	69.5	45.2
	5	304.2	140.5	83.2	54.0
	6	354.5	163.3	97.1	62.8
	7	405.5	187.0	110.6	71.3
	8	455.6	210.7	124.2	80.5
	9	505.8	233.6	138.2	89.3
	10	556.8	256.2	152.0	98.2

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Runtime Table

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		25%	50%	75%	100%
10kVA	0	25.6	11.5	8.2	5.0
	1	75.0	32.5	18.5	12.1
	2	112.3	48.9	27.5	17.9
	3	149.5	65.0	36.5	23.5
	4	187.3	81.4	45.3	30.2
	5	224.2	97.2	54.5	35.3
	6	262.2	113.0	63.6	41.2
	7	299.5	129.1	72.3	47.1
	8	336.2	145.2	81.5	53.2
	9	373.0	161.3	90.4	58.5
	10	411.3	177.0	99.3	64.3