

RAPTOR-31P Pro Series : 10kVA ~ 20kVA



Overview

- Online double conversion with DSP control
- Optimization battery group, the quantity of battery: 16/18/20pcs (32~40pcs supportable)
- Wide input voltage range: 208~478Vac
- Wide input frequency range: 40Hz~70Hz
- Input current harmonic: < 3%
- Dual input source (Optional)
- Maximum charging current up to 18A (Settable)
- Support 3/1 and 1/1 operation
- Generator compatible
- ECO mode operation for energy saving
- Design with maintenance switch
- Cold start

Features

- N+X parallel redundancy, support maximum 4 units in parallel
- Intelligent fan speed regulation
- Self-testing when UPS startup
- 50/60Hz frequency converter mode
- Colorful 2.4 inch TFT LCD display
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and overdischarge, output low voltage and fan fault alarm
- Multiple communication interface: RS232/RS485/USB/EPO/Dry contact port (Relay card/SNMP card/Parallel cable/Battery temperature sensor optional)

Application

Raptor 10~20kVA Pro, 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



Online (Double Conversion) UPS Topology



Remote Management Capability



3:1 or 1:1 Design



UPS Parallel Expansion



ECO Mode



Dual Input (optional)

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.

Model Name	RAPTOR-31P-020-0-PRO	RAPTOR-31P-020-1-PRO
Power Rating	20 kVA / 20 kW	
GENERAL		
Phase	3:1 or 1:1	
ECO Technology	Online ECO Mode Efficiency > 97%	
Parallel Expansion	Max. Units up to 4	
Form Factor	Tower	
INPUT		
Nominal Voltage	380/400/415Vac (3Ph+N+PE) or 220/230/240Vac (L+N+PE)	
Input Voltage Range	208~478Vac;120~276Vac	
Harmonic distortion	THDi ≤3% Linear load	
Power factor	≥ 0.99	
Frequency Range	40~70Hz (50/60Hz, 50±10Hz, 60±10Hz)	
Frequency Detection	Auto-sensing	
Bypass Voltage Range	Max.voltage: 220V: +25% (+10%, +15%, +20%), 230V: +20% (+10%, +15%), 240V: +15% (+10%) Min.voltage: -45% (-10%, -20%, -30%)	
OUTPUT		
Voltage	220/230/240Vac (L+N+PE)	
Voltage Regulation	±1%	
Output Voltage Setting	Configurable	
Output Frequency	(50 ± 0.1%, 60 ± 0.1%)Hz	
Power Factor	1	
Crest factor	3:1	
Overload Protection (AC Mode)	≤110% 60min, ≤125% 10min, ≤150% 1min, > 150% immediately turn to bypass	
Overload Protection (Battery Mode)	≤110% 10min, ≤125% 1min, ≤150% 5s, > 150% immediately shut down	
Transfer Time	0ms	
Harmonic distortion	THDv < 2% Linear load, THDv < 5% Non linear load	
Efficiency AC-AC	Up to 94.5%	
Output waveform	Pure Sinewave	
BATTERY		
Voltage	±96/108/120Vdc; battery quantity (16~20pcs, 16pcs default, Standard unit and 20pcs no power derating; 18pcs output power factor 0.8/0.9; 16pcs output power factor 0.7/0.8)	±120Vdc (2 x 20pcs 9Ah)
Runtime@100%Load(min)	Depend on the capacity of external batteries	3.5 minutes
Runtime@50%Load(min)	Depend on the capacity of external batteries	12.5 minutes
Charging current (Max.)	18A	2.7A
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 : continously beeping	
PHYSICAL & STANDARDS & ENVIRONMENT		
Dimension(WxDxH)/Weight	250×580×655mm (with wheel) / 38kg	250×900×868mm (with wheel)/ 181kg
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 : 0~95%(Non condensing) Altitude : < 1500m, derating required when >1500m; Noise level < 58dB @1 Meter	

1. Specifications are subject to change without prior notice
2. Data above are typical values for reference only, not as a basis for engineering design