

SATURN

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- High frequency, online, double conversion with full digital control.
- Compact design for a smaller footprint.
- Wide input voltage and frequency windows.
- 0.9 power factor.
- Adjustable charger – internal or external battery options.
- Self-testing when UPS startup.
- RS232/USB/EPO communication interface, SNMP optional.
- Cold start and auto restart functions.
- Design with maintenance bypass switch.
- Intelligent fan speed regulation.
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and over-discharge, output low voltage and fan fault alarm.
- Suitable for electronic, non-inductive loads.
- 12 Month Warranty.

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HIGH FREQUENCY TRANSFORMER LESS TECHNOLOGY TECHNICAL SPECIFICATIONS

MODEL	SAT1031	SAT2031
Capacity	10KVA / 9kW	20KVA / 18kW

INPUT	
Voltage	380 / 400 / 415VAC (3Ph + N + PE) 220 / 230 / 240VAC (L+N+PE)
Voltage Range	208~478VAC; 120~276VAC
Frequency Range	40~70Hz (50/60Hz Auto-Sensing)
Bypass Voltage Range	Max. voltage: 220V: +25% (Optional + 10% + 15% + 20%) 230V: +20% (Optional 10% + 15%) 240V: +15% (Optional +10%) Min. voltage: -45% (Optional -20%, -30%)
Frequency Protection Range	50/60Hz ±10%

OUTPUT	
Output Voltage	220 / 230 / 240VAC (L+N+PE)
Voltage Regulation	±1%
Power Factor	0.9
Output Frequency	Line mode: ±1% / ±2% ±4% / ±5% / ±10% of the rated frequency (Optional)
	Battery mode: 50 / 60 (±0.1%)(Hz)
Transfer Time	AC mode to battery mode: 0ms
	Inverter to Bypass: 0ms
Waveform (Battery Mode)	Pure Sinewave
Crest Factor	3:1
Harmonic Distortion	≤ 2% Linear load ≤5% Non linear load
Overload	AC mode: Loads ≤110%: last 60min turn to bypass; ≤125%: last 10min turn to bypass; ≤150%: last 1 min turn to bypass; ≤ 150 turn to bypass mode immediately
	Battery mode: Loads ≤ 110%: last 10min; ≤ 125%: last 1min; ≤125% shut down UPS immediately
	Bypass mode: Breaker 2 x 32A
Efficiency	up to 93.5%

BATTERY	
Voltage Std Unit	20pcs 9Ah
Voltage Long Run Unit	2 x 20pcs 9Ah
Charging Current	±96Vdc~± 120Vdc (16 ~ 20pcs, 16pcs default, standard unit and 20pcs no power derating: 20pcs output power factor 0.9, 18pcs output power factor 0.8; 16pcs output power factor 0.7)
	14A Max.
	18A Max.
	Charging current can be set according to battery capacity

PHYSICAL	
Dimension WxDxH (mm)	250 x 900 x 870
Net Weight (kg's)	61

ENVIRONMENT	
Operating Temperature	0 °C - 40°C
Storage Temperature	<1500m, derating required when >1500m
Humidity Range	0~95% (Non condensing)
Altitude	-25°C~55°C
Noise Level	<55dB at 1 meter

STANDARDS	
Safety	IEC/EN62040-1, IEC/EN62477-1
EMC	IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8

SUITABLE APPLICATIONS	COMMERCIAL IT APPLICATIONS NON-INDUCTIVE LOADS
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