



ONLINE DOUBLE CONVERSION INDUSTRIAL FREQUENCY UPS 10KVA-40KVA

3-phase in / 1-phase out

TO BE GLOBAL LEADER IN POWER SOLUTIONS



Product Overview

The BK-G31 series is a sinusoidal online uninterruptible power supply (UPS) featuring a double-conversion topology, SPWM pulse-width modulation technology, IGBT power modules, and built-in harmonic suppressors and an isolation transformer.

Even in unstable power situations or power outages, it provides loads with pure, interference-free, and frequency- and voltage-stabilized sine wave power, ensuring continuous operation of critical equipment. With its strong load capacity and excellent compatibility, it meets the needs of various industries for highly reliable and stable power supply.

Applications

- Storage, network equipment, VoIP, and communication devices
- Micro data centers of small and medium-sized enterprises
- Automation equipment and office terminals
- Precision instruments and equipment
- Branches of large enterprises
- Bank branches

Technical Advantages

- **Stable and Reliable Power Protection**
Effectively solves power problems such as outages, voltage fluctuations, and frequency variations, ensuring continuous operation of critical equipment.
- **Highly Integrated Digital and Networking Technologies**
Facilitates management and monitoring, improving efficiency and reducing operational costs.
- **Strong Environmental Adaptability and Overload Capacity**
Ensures stable operation under extreme conditions, enhancing equipment availability.
- **Flexible Parallel Redundancy Design and Multiple Power Supply Modes**
Meets diverse business needs, improving system reliability and scalability.



Product Features

■ Advanced Design

Online double-conversion design with zero phase-shift output isolation transformer ensures pure and stable power output.

■ High Power Factor

Output power factor reaches 0.8, and input power factor up to 0.95 (with input filter), enhancing power efficiency.

■ Strong Environmental Adaptability

Wide input voltage and frequency range adapts to harsh grid environments, ensuring stable operation.

■ Strong Overload Capacity

Excellent output overload and short-circuit resistance (sustainable for 5 seconds) protects equipment from damage.

■ N+X Parallel Redundancy Design

Supports up to 6 units in parallel, including different models, improving system reliability and scalability.

■ Quasi-Modular Design

Independent heat sinks for power devices facilitate installation and on-site maintenance, reducing maintenance costs.

■ LBS Synchronization

Enables synchronization of two independent UPS systems, enhancing overall system reliability.

■ Generator Compatibility

Power Walk In slow start function reduces inrush current, protecting generators and UPS equipment.

■ Advanced Battery Management

Includes temperature compensation, battery life extension, discharge time prediction, and battery self-test, extending battery life and ensuring performance.

■ DSP Full Digital Control

Dual DSP digital control technology ensures system stability and reliability, improving control accuracy and response speed.

■ Automatic Power-On

Memory auto-start function enhances equipment usability.

■ Large LCD Display

Chinese/English LCD menu and real-time data display for easy monitoring of equipment status.

■ Flexible Network Monitoring

Standard RS232/RS485 communication interfaces, optional SNMP/JBUS/MODBUS dry contact cards for remote monitoring and management.

■ Intelligent Fan Speed Control

Adjusts fan speed based on internal temperature and load, reducing noise and energy consumption.

■ DC Start Function

Batteries can be used directly to start the UPS, convenient for use without mains power.

■ Comprehensive Protection

Includes power-on self-diagnosis, short-circuit, inverter over-temperature, battery under-voltage, battery over-charge, and surge protection.

■ Flexible Power Supply Modes

Offers normal mode, combined power supply mode, ECO mode, auto-start mode, and variable frequency mode to meet diverse business needs.

■ Rich Optional Accessories

Includes harmonic filters, bypass current sharing inductors, Class C lightning protection boxes, parallel cables, load synchronization (LBS) cables, SNMP/JBUS/MODBUS/dry contact cards, battery ground fault components, battery temperature sensors, and UPS room signals.

Specifications

Capacity	KVA		10KVA	15KVA	20KVA	25KVA	30KVA	40KVA	
	KW		8KW	12KW	16KW	20KW	24KW	32KW	
Phase			3-phase in / 1-phase out						
Efficiency	Double Conversion Mode		90%						
	Economy Mode		96%						
AC Input	Rated Voltage		380/400/415Vac						
	Voltage Range		±25%						
	Wiring		3 phase 5wires(3L+N+PE) / 3 phase 4 wires(3L+PE)						
	Frequency Range		50/60Hz±10%						
	Power Factor		>0.95(Add filter)						
Bypass Input	Nominal Voltage		220Vac						
	Voltage Tolerance		±25%						
	Wiring		Single phase three Wire (L+N+PE)						
	Frequency Range		50/60Hz±5% (±0. 5%, +1%, ±2%, ±3% Configurable)						
AC Output	Nominal Voltage		220 ±1% / 230 ±1%						
	Power Factor		≥0.8 (Customizable)						
	Frequency		50/60Hz						
	Output THD		Sine wave THDV is less than 2% (pure linear load)						
	Switching Time		0ms						
	Efficiency (comprehensive)		≥92%						
	Voltage Regulation Accuracy	Steady State	±1%						
		Transient	±5%						
	Overload Capacity		105%~110%:60min Switch to bypass;110%~125%: 10min Switch to bypass;>125%: 10s Switch to bypass						
Others	Battery	Battery Voltage	192Vac			240Vac		384Vac	
	Environment	Operating Temperature		-10~40℃					
		Storage Temperature		-25~55℃(Battery not included)					
		Humidity		0~95% (Non-condensing)					
		Altitude		1500m, If the limit is exceeded, use the derated capacity in accordance with GB/T3859.2.					
		Noise		<65dB@ 1 meters					
	Alarm Function	Alarm Range		Output short circuit, overload, over temperature, battery undervoltage					
		Alarm Method		Sound alarm					
	Protection Function		Output short circuit, overload, over temperature, battery undervoltage, output over-voltage and under-voltage, lightning protection (optional)						
	Communications and Management	Communication Function		Standard: RS232 ; Optional: RS485/SNMP/Dry Contact					
		Display Panel		LCD display / LED status indicator					
	Optional Accessories		Support SNMP management and network management						
	Dimensions (W×D×H) MM		400×750×1010						
	Weight (KG)		135	200	245		300	520	

PRODUCT CATALOG

UPS System
Voltage Stabilizer
Transformer

VFD Inverter
Soft Starter
Solar Inverter

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