

# Power Guard UPS PGELF31 Series (20KVA-60KVA)

**Power Backup + Protection**  
Give Protection from Power impurities.  
Save your work & equipment when Power goes.



AP-LF31 series online intelligent digital UPS congregates the essence of Asia Powercom and uses state of art technology in traditional simulation circuit era. It adopts the digital control technology of which the core is high speed MCU and uses the sixth generation low-exhaust, high power IGBT and static switch as power components. Guided by these most advanced technologies in the world, it is really a first class product.

AP-LF31 series UPS also adopts 4 layer PCB. The capacity can be from 10KVA-60KVA, widely used in telecommunication sectors, computers, data centers, BPO, banks and Financial Institutions, etc.

## **Main Features:**

- Pure sine wave output, true on-line double conversion design with isolation.
- Adopt 4 layer PCB, and SMD technology.
- Using sixth generation IGBT, the inverter has high efficiency, low temperature, high reliability.
- Touch screen display, with the simple operation and Intuitive data and optional display language.
- With Isolation Transformer, low frequency design.
- Set the work mode on the display directly, UPS mode, ECO mode, EPS mode.
- Provides Intelligent detection on LCD display panel, all power's supply working status, breaker status, and all circuits working status.
- Accepts 100% imbalanced load without change over to bypass.
- Cold start
- Generator compatible
- RS232 and RS485 standard feature.
- Optional SNMP and dry contact connection.
- Adjustable battery charger current.



**UPS with Built in Battery - Plug & Play - 1 year warranty**

## Specifications:

Model	PGE-LF31-20K	PGE-LF31-30K	PGE-LF31-40K	PGE-LF31-60K
Normal Capacity (KVA)	20KVA	30KVA	40KVA	60KVA
<b>INPUT</b>				
Work Principles	Pure sinewave online, double conversion with isolation			
Phase	3 Phase + N + G			
Input Power Factor	> 0.75 at full load, > 0.95 with 12 pulse			
Rectifier Type	6 pulse (extra input filter and 12 pulse optional)			
Input THDi	30% with 6 pulse, < 8% with 12 pulse rectifier			
Nominal Input Voltage	380 VAC / 400 VAC / 415 VAC			
Range	± 25%			
Nominal Input Frequency	60Hz ± 10%,			
Output Ripple	< 2%			
Soft Start	0 ~ 100% 5 sec			
<b>CHARGER</b>				
Charge Mode	Constant current to constant voltage, with temp compensation; with auto change			
Float Voltage	410VDC			
Boost Voltage	435VDC			
Temperature Compensation Voltage	3mV/ 1 pcs			
Charge Current	0.1C ( automatically change depending on connected battery)			
<b>BATTERY</b>				
Battery Type	Maintenance free lead acid battery			
Battery Capacity	7 ~ 999A settable (according to capacity)			
Battery Number	30 pcs 12V or 180 pcs 2V (nominal voltage 360VDC)			
<b>INVERTER</b>				
Phase	Single Phase L + N			
Capacity (Load PF)	Rated capacity x 0.8			
Nominal Voltage	220VAC / 230VAC / 240VAC			
Output Voltage Stability	± 1% (stable load), ± 3% (fluctuant load)			
Output Frequency Stability	50Hz/ 60Hz < ± 0.5%			
Crest Factor	> 3:1			
Output Waveform Distortion	Sine wave, linear load < 3%; non-linear load < 5%			
Dynamic Characteristic	Instant voltage < ± 5% (from 0 to 100%), Instant recover time < 10ms			
Unbalanced Load Voltage	< ± 5%			
Overload Protection	110% 30 min; 125% 10 min; 150% 30 sec; 200% 200 ms			
Efficiency	> 93% (full load)			
<b>BYPASS</b>				
Phases	Single Phase L + N			
Nominal Voltage	220VAC / 230VAC / 240VAC			
Transfer Time	< 1ms (static switch with 0 transfer time)			
<b>PROTECTION</b>				
Frequency Over Limit	Input voltage/frequency/over limited; wrong phase; lack phase			
Output Protection	Over current short circuit; factor low protection			
Battery Protection	Over charge : over discharge protection			
Temperature Protection	Ambient over temperature protection; inverter over temperature protection			
Hardware Failure Protection	Power abnormal, breaker cut off, breaker overload, power component over current/over voltage etc. protection			
<b>SYSTEM PARAMETERS</b>				
Working Environment	Temp: 0-40°C, relative humidity 30% - 90%; (a 1% decrease against 100 meters rise. Altitude 4000m MAX)			
Cooling Down Method	Compulsive Ventilation (with temperature control)			
Communication Interface	RS232, RS485 optional SNMP card (for internet long-distance monitoring)			
Redundancy Function	In series or N + 1 parallel (optional)			
Anti-surge Capacity	10/700 μS, 5KV; 8/20 μS, 20KA			
Protection Level	IP21			
Safety Performance	Vin-n Vout-n 3000VAC, creepage < 3.5 mA isolation resis			
Noise (dB)	48-55	55-60		
Quality	ISO9001:2000			
Dimension (WxDxH) mm	430x765x1050	430x765x1080		980x800x1800
Weight (Kg)	185	215	318	445



All specifications are subject to change without prior intimation