

# LF Series



LF SERIES

### Applications:

LF Series is suitable for industrial and facilities applications.



Industrial process (manufacturing and control system, industrial machinery, instrument and measurement, process monitoring and control, security and transport systems...)



Infrastructures (hospital, airport, semiconductor, water treatment, power plant, metallurgy)



Energy industry (gas and oil, petrochemical, mining)



Military application

### • Patented chassis structure offers 100% front access

Mechanical design with patented structure\* allows heat shunt to accomplish 100% front access. It allows easy maintenance and wiring for inputs, outputs and periodically replaced materials.

\* Patent no: US 9,888,616 B2, ZL 2015 2 1030347.7, M521295, ZL 2016 2 00525.3, M524589

### • Applied advanced graphene coating with industrial-grade components for effective heat dissipation

This UPS is applied advanced graphene coating technology to ensure UPS safe and continuous operation even if fans are not working. Besides, high performance protective coating is applied for PCBA protection from water and environmental corrosion. Installed with skived fin heat sinks and industrial-grade fans, it offers the maximum heat dissipation in applications that have high airflow and small space and dramatically decreases the risk of thermal pollution. This UPS is also compliance with CB standard.

### • Standard IP31 protection, optional IP42 kit to withstand harsh environment

With IP31-rated protection, this UPS is allowed for side-by-side operation against the wall. To offer higher-grade protection in harsh industrial environment, we also offers optional IP42 kit.

### • International brands of key components with component lifecycle management for extended product lifecycle

We only use international brands of key components such as semiconductors, capacitors, fans and breakers to meet diverse environment. Integrated component recycle management effectively manages and prolongs product lifecycle.

### • Redundant design to guarantee product reliability

To guarantee continuous operation of the product in harsh environment, LF Series is designed with redundant power supply. Margin design is applied to internal key components to ensure safety operation.

### • Parallel capability up to 4 units

Up to 4 units in parallel can be operated without adding additional hardware, increasing system capacity as well as operation reliability for power redundancy.

### • Temperature compensation to prolong battery life

LF Series is designed with temperature compensation charging to prolong battery life by adjusting voltage depending on ambient temperature. Besides, extra battery tripper connector allows to turn off battery connection forcibly to avoid secondary accident during emergent situation.

### • Backfeed protection and in-built 40kA surge protection guarantee safety operation

With backfeed protection installed, the UPS will prevent current from being passed back to the input terminals of the UPS from the inverter output. This is extremely important for safety reason because it enables a service engineer to work on the incoming supply side of the UPS without risk of receiving an electric shock. Built-in 40kA surge protection module reduces downtime and protects sensitive electronic equipment against the damaging effects of transients caused by lightning, utility switching and more.

### • 7" colored LCD with customized control setting and accessible informative data of the UPS

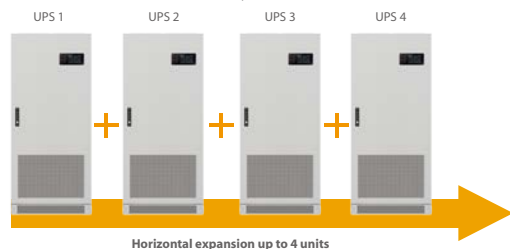
LF Series series is applied 7" color LCD display to provide comprehensive and intuitive UPS information. Users can check UPS status in live power flow diagram, configure UPS setting and access event and fault logs up to 2000 threads.

- Live power flow diagram
- Component lifecycle management
- Event and fault logs up to 2000 threads
- Battery remaining capacity/time
- Parameter setting download and upload
- Fan warning



### • Accepts dual-mains inputs

LF Series series is allowed to connect two separate power inputs to increase operation reliability.



### • Optional and diverse dust filter selections

## LF31-220 Series 3P/1P 220VDC Online UPS Selection Guide

MODEL	LF3110-220	LF3120-220	LF3130-220	LF3140-220	LF3160-220	LF3180-220	LF31100-220	LF31120-220
CAPACITY	10KVA/8KW	20KVA/16KW	30KVA/24KW	40KVA/32KW	60KVA/48KW	80KVA/64KW	100KVA/80KW	120KVA/96KW
<b>INPUT</b>								
Rectifier Type	6 pulse or 12 pulse							
Main Input and Bypass Input	Supports dual inputs							
Nominal Voltage	380VAC/400VAC/415VAC							
Acceptable Voltage Range	304VAC ~ 456VAC							
Frequency	50Hz/60Hz ± 10%							
TVSS	40kA							
<b>BYPASS</b>								
Nominal Voltage	220VAC							
Input Voltage Range	165VAC ~ 275VAC							
<b>BATTERY</b>								
Battery Voltage	220VDC (Adjustable)							
Cold Start	Yes							
<b>OUTPUT</b>								
Power Factor	0.8							
Nominal Output Voltage	220VAC/230VAC/240VAC							
Output Voltage Regulation	±1%							
Frequency	50Hz/60Hz ± 1%							
Overload Capability	110% continuous running; 125% for 10 min; >150% for 1 min							
<b>PHYSICAL</b>								
IP Protection	IP31 (default), IP42 (optional)							
Dimensions,DxWxH(mm)	800 x 800 x 1800				800 x 1200 x 1800		800 x 1600 x 1800	
Net Weight (Kgs)	354	400	480	680	910	1010	1360	1620
<b>ENVIRONMENT</b>								
Operating Temperature	0~ 40°C							
Storage Temperature	-25°C ~ 55°C							
Humidity	0~95% (non-condensing)							
Altitude	1000m							
<b>MANAGEMENT</b>								
Modbus RS-232/RS485	Supports Windows® family, Linux and MAC							
Dry Contacts	5 outputs and 4 inputs							
Optional SNMP	Power management from SNMP manager and web browser							
<b>STANDARD</b>								
Safety	IEC62040-1-2017							
EMC Immunity	IEC61000-4-5							
EMC Emissions	IEC62040-2-2018							
Approvals	CE / CB/ Conformance testing / EMC / ROHS2 / Reach / YDT1095-2018							

Product specifications are subject to change without further notice