Low Frequency Online UPS Systems
120 - 800 kVA (3Ph/3Ph)

Catalogue

interberg batteries ltd
www.interberg.com
APPLICATION

Mainly used in large IDC rooms, banks/securities settlement centres, communication network management centres, semiconductor product lines and large automation production with its control system. Improved according to the special needs and requirements of many users, these LFO UPS Systems have been also used in large sport venues, conference rooms, theatres and cinemas, highways and railway tunnels, airports, hospitals, etc. etc.

KEY FEATURES

- The Interberg LFO Online UPS Systems use advanced 6th generation DSP and full digital control technologies to realize higher system stability.
- The Output Power Factor is 0.9.
- Advanced distributed active parallel technology enables parallel operation of up to 6 UPS units without the need of a centralized by-pass cabinet.
- 6-inch extra large LCD display in 12 different language options: Spanish, English, French, German, Russian, Arab ....
- Extra wide input voltage and frequency range makes it possible these UPS Systems to operate under severe power grid conditions.
- Intelligent battery management maintains battery automatically, thus prolonging its life expectancy.
- Standard Input/Output filter improves the system EMC performance.
- Extra strong capability to withstand output overload and short circuit, ensuring the system stability and system safety under the toughest conditions.
- The layered independently-sealed ventilation channel, the redundant fan, the circuit boards with protective paints and the embedded dust filter produces a highly efficient heat dissipation, effectively protecting the product even under the harshest operation conditions.

EXCELLENT ELECTRICAL PERFORMANCE

On-Line Double Transformer Structure: double DSP Control Technology

- The LFO UPS Systems use real online double transformer structure. This architecture is currently the best to solve the power structure. The framework can almost completely solve all the power problems, such as power utility high and low voltage, voltage instantaneous fall, reduced oscillations, high voltage pulse, voltage fluctuation, surge voltage, harmonic distortion, clutter interference, frequency wave power supply problems, etc. This architecture provides stable and pure sine wave power for the load.

Fitted with double DSP high speed digital signal processing chip, collaborative central CPU microprocessor common to the system control, feedback, measuring display, communication etc. for all-round real-time processing.

All this makes it possible the system parameters to keep the same when environmental conditions (temperature, humidity, noise, etc.) change. The LFO UPS will provide accurate current, voltage, frequency and waveform output, even when the input signal is distorted.

LFO UPS SYSTEM WORKING SYSTEM

- The Interberg LFO UPS Systems use AC-DC – AC converter. The first level transformer (AC-DC) adopts SCR 3-phase full controlled rectifiers; 3-phase AC input voltage transform into stable DC bus voltage. The rectifier holds current and charge functions and adopts the advanced temperature compensation technology that results in a prolonged battery life. The inverter main power adopts high power insulation gate bipolar transistors (IGBT) as its inverter unit. Controller adopts advanced space vector pulse width modulation (SVPWM) technology. Finally, the DC Bus voltage inverter backs to AC voltage.

- Rectifiers and inverter work at same time when the utility power is normal, to supply both power to the load and to the battery charger. When the utility power fails, the rectifier stops working and the battery enter into functioning, in connection with the inverter, to supply power to the load. If the battery voltage drops to the discharge cut-off voltage and the utility power hasn’t returned to normality, the UPS will shutdown. The Battery’s discharge and cut-off voltage are preset. In case of an inverter fault or overload the external communications bypass will still be possible through the bypass switch Q2 and the static bypass to supply power to the load. In addition, if the UPS needs some repair or maintenance, the UPS will still be able to provide power to the load by means of the internal manual control maintenance bypass switch Q3.
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easy installation:
* layered freestanding obturator ventilation
* favourable ventilation design
* wall-leaned construction design
* in and out cable ways on top

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Online
UPS Systems
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A LCD Display
B Air Filter
C Electronic Control PCB
D N+X Assistant Power Supply PCB
E Battery Monitor Connect Terminal
F 220 V Socket
G Input Power Switch
H Bypass Power Switch
I Maintain Bypass Switch
J Output Switch

DC Bus Module  input/output power distribution  N+X Power Module

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