

# Digital Energy™ LP33 Series

Three Phase 10 - 20 kVA  
Uninterruptible Power Supply (UPS)



LP10-33U  
LP20-33U

The Digital Energy™ LP33 Series is a robust, high-performance UPS system that provides power protection for a wide range of mission-critical applications. Every LP33 Series unit operates in a double conversion mode with true continuous on-line VFI (voltage and frequency independent) operation yielding maximum levels of power protection even under the toughest conditions. In addition, the LP33 UPS is a high efficiency design with low THD (total harmonic distortion) which takes up less space and is easy to install and service, especially in an office environment. Its robust design makes it suitable for traditional industrial applications as well.

To achieve redundancy or to increase power capacity, GE's unique **Redundant Parallel Architecture™ (RPA™)** technology enables the LP33 Series to parallel up to four units in a flexible and cost effective manner. In the RPA system, every UPS is controlled in a true peer-to-peer configuration with redundancy in all critical elements and functions. This advanced technology provides the highest possible system reliability for mission critical applications eliminating any single points of failure associated with other types of UPS systems. The RPA system precisely synchronizes the output phase and automatically shares the load supported by each of the UPS.

Through their complete life cycle, every GE UPS system is fully supported by **GE's Global Services** team, which provides world-class, 24 x 7 preventive and corrective services, training and application expertise.

imagination at work



## Features & Benefits

- > **High input power factor** (.98) and **low input distortion** prevents disturbances to other electrical equipment, thus eliminating the need for costly filters or over-sized feeders
- > **Compact footprint**, easily transportable, robustly designed system with low audible noise suitable for both office and industrial environments
- > Utilizes high-frequency PWM (Pulse Width Modulation) IGBT digital control technique resulting in extremely **low output distortion** and **fast transient response** eliminating the need for over-sizing the UPS
- > **Intelligent Energy Management™ (ECO-mode)** enables automatic energy savings under stable power conditions
- > **Redundant Parallel Architecture™ (RPA™)** increases system reliability by eliminating single points of failure without increasing overall system complexity
- > **Superior Battery Management (SBM)** enhances battery lifetime resulting in reduced cost of operation
- > **Transformerless design** for smaller footprint, less weight and better efficiency
- > Robustly designed to handle **short-circuit, high overload and over-heating** conditions, thus reducing maintenance and service costs
- > **LP33 High Crest Factor (3:1)** capability makes it ideal for computer loads while eliminating the need to oversize the UPS
- > **Very wide AC-input voltage** capability minimizing the need to switch to batteries which results in increased battery life
- > Integrated **internal manual maintenance bypass** reducing the need for external equipment
- > Fully compliant with North American standards for VFI (UL, CUL 1778) operation providing full power protection for demanding critical applications
- > Automatic start-up procedure and a user-friendly interface with multi-language capability simplifying UPS operation
- > Every GE UPS can be monitored and managed via LAN, serial/modem connection or through the Internet
- > UPS management software facilitating operation and maintenance of the UPS
- > Three available slots for options such as: SNMP plug-in card, potential-free relay contacts, RPA and RS232/contact interface providing maximum flexibility
- > Matching battery packs for expanded backup times

## Technical Specifications-UL approved

Models	LP10-33U	LP20-33U
Rating (kVA/kW)	10 / 8	20 / 16
Backup Time @ 50% / 100% loads	26 / 10 min.	26 / 10 min.
Enclosure (Table 1)	A	A
Net Wgt Incl. Batteries (lbs)	640	905
Input Voltage (VAC)		
Nominal (V)	208	208
Range @ 100% Load (V)	162 - 285	162 - 285
Range @ 50% Load (V)	146 - 285	146 - 285
Input Power Factor	0.98	
Input Frequency (Hz)	45 - 65	
Output Voltage (VAC) (sinusoidal)	208	
Output Frequency (Hz)	50 / 60	
Output Voltage Regulation	+/- 1%	
Output THD at Linear Load	< 2%	
Output THD at Non-linear Load	< 3%	
Crest Factor Handling Capacity of a Non-linear Load	3 : 1	
Overload Capability on Inverter	125% 10 min., 150% 1 min.	
Communications Interface	RS232, Plug and Play, open collector alarm contacts	
Color	Front bezel: Aluminum Grey (RAL9006); Cabinet: Pure White (RAL9010)	
Environment	IP20 (IEC 60529)	
Operating Temperature / Humidity	32° F - 104° F (0° C - 40° C) / 95% Non-condensing (Battery: 68° F - 77° F recommended)	
Audible Noise	50-55 dBA - 3.3 feet (1 meter) - load and temperature dependent	
Safety Classifications & Listings	UL, C-UL: UL 1778; CE: EN50091-1-1; EN 60950; IEC 950	
EMI	FCC Part 15 Class A / EN50091-2	
Surge Protection	IEC 1000-4-5 (6kV 1.2/50 µsec - 3kA 8/20 µsec) IEEE 587 B, EN 50091-2	
Standard Connectivity	RS232; programmable alarm contacts; SNMP (optional)	
Warranty	24 months	

Specifications subject to change without notice.

Table 1	Height	Width	Depth
inches (cm)			
Enclosure A	51.6 (131.1)	22 (71)	30.7 (78)



1 Oak Hill Center  
Suite 301  
Westmont, IL 60559 USA  
866-433-3877

