

# GE Digital Energy Power Quality

## Introduction

The Digital Energy™ LP-11U Series is a robust, high-performance UPS system that provides power protection for a wide range of mission critical applications. Every LP-11U Series unit operates in a double conversion mode with true on-line VFI (voltage and frequency independent) operation, yielding maximum levels of power protection even under the toughest conditions. In addition, the LP-11U Series UPS is easy to install and service, especially in an office environment. The 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 LP-11U Series to parallel up to four (4) 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.

Every GE UPS system is fully supported by **GE's Global Services** team, providing world-class, 7x24 preventive and corrective services, training and application expertise.

## Features and Benefits

- > **High input power factor** (.99) and **low input distortion** (<10%) prevents disturbances to other electrical equipment, eliminating the need for costly filters or oversized feeders
- > **Compact footprint**, easily transportable, robustly designed system with low audible noise
- > **Fully isolated output**, provides additional critical power protection
- > Utilizes high-frequency PWM (Pulse Width Modulation) digital control technique, resulting in extremely **low output distortion** and **fast transient response**, eliminating the need to oversize the UPS
- > **ECO-mode** enables automatic energy savings under stable power conditions
- > **Superior Battery Management (SBM)** enhances battery life and reduces cost of operation
- > **Very wide AC-input voltage and frequency** capability minimizes the need to switch to batteries, resulting in increased battery life
- > **High Crest Factor** (5:1) capability ideal for computer loads
- > Integrated **internal manual maintenance bypass** reduces the need for external equipment
- > Robustly designed to handle **short-circuit, high overload and overheating** conditions, reducing maintenance and service costs
- > Fully compliant with North American standards for VFI (UL, cUL 1778) operation, providing full power protection for demanding, critical applications

# 5-10kVA

## Digital Energy™ LP-11U Series Uninterruptible Power Supply (UPS)



## Options

- > **Remote monitoring and diagnostics** via LAN or internet
- > **UPS management software** facilitates operation and maintenance of the UPS
- > **Input and output PDU** available for 5-10kVA sizes
- > Three available slots for options:
  - SNMP plug-in card, potential-free relay contacts
  - RPA™ Kit: Any single UPS can be easily field-configured for Redundant Parallel Architecture™
  - RS-232/contact interface, providing maximum flexibility
- > **Dual AC input option**
- > **Additional external matching battery cabinets** are available for extended runtime requirements

## Technical Specifications – UL approved

Models	LP-11U-5	LP-11U-5 (120V)	LP-11U-6	LP-11U-6 (120V)	LP-11U-8	LP-11U-10
Rating (VA/W)	5000 / 4000	5000 / 4000	6000 / 4800	6000 / 4800	8000 / 6400	10,000 / 8000
Backup Time @ 50% / 100% loads	25 / 10 min.	25 / 10 min.	20 / 8 min.	20 / 8 min.	29 / 11 min.	22 / 8 min.
Enclosure (Table 1)	A	B	A	B	A	A
Net Wgt Incl. Batteries (kg/lbs)	134 / 295	175 / 386	134 / 295	175 / 386	175 / 386	186 / 410
Input Voltage (VAC)						
Nominal (V)	208	120	208	120	208	208
Range @ 100% Load (V)	162-285	81-141	162-285	81-141	162-285	162-285
Range @ 50% Load (V)	146-285	72-141	146-285	72-141	146-285	146-285
Input Power Factor	.99					
Input Frequency (Hz)	40-70					
Output Power Factor	.8					
Output Voltage (VAC) (sinusoidal)	120+208+220/230/240 User Selectable					
Output Frequency (Hz)	50 / 60					
Output Voltage Regulation	+/- 1%					
Output THD at Linear Load	< 1%					
Output THD at Non-linear Load	< 2%					
Crest Factor Handling Capacity of a Non-linear Load	5:1					
Overload Capability on Inverter	110% 20 min., 130% 3.5 min., 150% 2 min.					
Color	Front bezel: Aluminum Grey (RAL 9006); Cabinet: Pure White (RAL 9003)					
Environment	IP20 (IEC 60529)					
Operating Temperature / Humidity	32° F - 104° F (0° C - 40° C) / 95% Non-condensing					
Audible Noise	40-50 dBA - 3.3 feet (1 meter)					
Safety Classifications & Listings	UL, cUL 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					
Connectivity	RS-232; programmable alarm contacts (optional); SNMP (optional)					
Warranty	24 months					

Specifications subject to change without notice.



Table 1

	Height	Width	Depth
Enclosure A	26.8" (68 cm)	12.3" (31.2 cm)	28.7" (72.9 cm)
Enclosure B	39.2" (99.6 cm)	12.3" (31.2 cm)	28.7" (72.9 cm)



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