GE Consumer & Industrial
Power Protection

Digital Energy™ LP Series UPS

Uninterruptible Power Supply 3 - 30 kVA

GE imagination at work

For more than a century, GE has led the way with innovative technologies and groundbreaking quality initiatives – literally helping to power the world. Along the way, through the development and delivery of state-of-the-art products and uncompromising service, GE has also built a legacy as a leading supplier of critical power solutions.

To bridge the gap between the traditional utility grid and the needs of today's business, GE offers a complete portfolio of critical power products and services, from desktop Uninterruptible Power Supply (UPS) units to engineered power systems, and from basic UPS and battery maintenance to comprehensive service contracts covering every aspect of your power quality and delivery system.

At GE, our goal is simple – to never let power quality stand in the way of our customers' success. That's why GE is committed to continue developing and delivering

UPS technology for the digital world

The power of GE

GE is a diversified technology and services company dedicated to creating products that make life better from aircraft engines and power generation to financial services, medical imaging, television programming and plastics. GE operates in more than 100 countries and employs more than 315,000 people worldwide.

The company traces its beginnings to Thomas A. Edison, who established Edison Electric Light Company in 1878. In 1892, a merger of Edison General Electric Company and Thomson-Houston Electric Company created General Electric Company. GE is the only company listed in the Dow Jones Industrial Index today that was also included in the original index in 1896.

GE is proud of its impressive track record for introducing leading edge products, accomplishing growth, having strategic customer relationships and a global presence as broad and expansive as its portfolio of products. GE is committed to maintaining a leadership position in all four of its company-wide initiatives (Six Sigma, Globalization, e-Business/Digitization and Services) to achieve maximum results, whilst embracing the values that are at the heart of the business - imagine, solve, build and lead.

UPS Product Technology

GE is a leader in the field of critical power protection. It's UPS Product Technology business designs, manufactures and delivers premium power quality products and related software products that ensure organisations all over the world enjoy a safe and managed power supply.

Protect your critical power application with a GE UPS – ranging from 350VA to 4MVA. Using state of the art technology GE has developed different UPS with high reliability and maximum application flexibility.

With a GE power solution in place, your mission-critical equipment is protected from any fluctuation in your power source, enabling you to concentrate on your core activities. Leave your critical power needs with GE, a reliable power quality supplier for more than 100 years.

Digital Energy™ LP Series
Uninterruptible Power Supplies
3 - 30 kVA

The Digital Energy™ LP Series provide critical power protection for many different applications. The LP Series is easy to install and service, optimised for the office environment. The robust design is also suitable for more traditional, industrial applications. Both the power and reliability of the system can easily be expanded by adding units, creating a redundant system which has no single points of failure. This is achieved by ultilising GE´s unique Redundant Parallel Architecture™ (RPA™) technology.

Designed as a true VFI (Voltage and Frequency Independent) UPS, the LP Series is an on-line double conversion, intelligent and heavy duty UPS. The VFI concept ensures the highest level of protection, even under the toughest conditions.

complete range

- **LP 11**
  Single phase input / single phase output
  3, 5, 6, 8, 10 kVA
  (5-10 kVA also available with 3 phase input)
- **LP 31**
  Three phase input / single phase output
  8, 10, 15, 20 kVA
- **LP 33**
  Three phase input / three phase output
  10, 20, 30 kVA

full functionality

- Multi-language LCD, easy to use
- Excellent overload behaviour, withstands toughest conditions
- Cold start function (start-up without mains present)
- Manual bypass integrated in UPS
- Equipped with RS232 serial port
- Fits well in office environment
- Frequency converter

features & benefits

- Low input current distortion and high input power factor eliminates need for costly filters or oversized generator
- Small footprint and wheels
- Advanced technology enabling silent operation
- High output power factor allows for optimal sizing of UPS
- Low output voltage distortion
- Superior Battery Management
- ECO mode enables automatic energy savings under stable power conditions

applications

- Computer and data centres
- Call centres
- Manufacturing and process control units
- Medical equipment and healthcare facilities
- Transportation infrastructure
- Security systems
- Financial institutions
- Fixed and mobile voice and data transmission

superior battery management

- Automatic battery test, prevents “surprises“
- Battery calibration test, enables tracking of battery aging
- Temperature compensation, prevents overcharging
- Load dependent end-of-discharge voltage and no load shutdown prevents deep discharge of batteries

- *No surprises*
- *Prevents damage*
- *Extends life time of batteries*

options

- SNMP plug in card for integration into networks
- Potential free alarm contacts
- Matching battery packs for extended back up times
- Redundant Parallel Architecture™

RPA™

Redundant Parallel Architecture™

GE provides a unique technology called Redundant Parallel Architecture (RPA) that can parallel Uninterruptible Power Supply (UPS) modules with true redundancy. With RPA, there is no need for external electronics or switches to control the UPS modules in the parallel system. One of the UPS modules in the system arbitrarily takes a leadership role, while the other UPS modules have access to all control parameters. If one UPS fails to operate, the load is automatically redistributed among the others. If the lead UPS fails to operate then a different UPS automatically takes on the leadership role. The RPA systems are designed to have no single points of failure, ensuring the highest level of power protection for critical loads.

Many other so-called redundant UPS offerings have one critical shortfall, in that they have critical components that are not redundant. RPA technology provides complete redundancy of all critical components and there are no single points of failure. RPA technology allows UPS system expansion not only to increase capacity but also to improve the reliability of the power provided to critical loads. For mission critical applications, RPA technology provides true redundancy for the highest reliability.

- **RPA Configuration** provides complete redundancy of all critical components and allows paralleling of up to four units for increased load capacity. It ensures excellent dynamic behaviour based on output voltage load sharing. This provides the highest reliability and availability for mission-critical applications
- **Modular design** allows for system upgrades to meet future power needs without any interruption to the critical load or transfer to bypass
- **Easy to install and maintain**
- **Scaleable** design allows for **efficient use of capital**
- **Peer-to-Peer architecture** where any UPS can be the “logic leader” ensuring **no single points of failure**

Connectivity solutions

Increased system availability and process protection

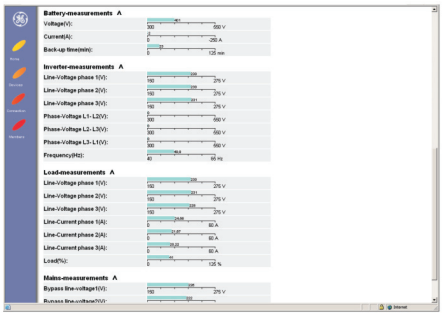
protection software

The main function of the GE protection software is data and operating system protection. JUMP DataShield™ diminishes the risk of lost data or system crashes. The software provides events handling and computer shutdown for all major operating systems, protecting the security of precious data. Multi-vendor and multi-platform environments as well as client-server structures are managed, using SNMP-based network communication protocols.

JUMP Manager

management software

The GE UPS management software provides direct access to remote UPS and active management of each UPS in multi-unit configurations to ensure efficient and predictable power quality. A network manager or facilities engineer can use JUMP Manager™ to monitor and control the local or remote UPS, and the equipment and processes it protects.
Typically, an SNMP connection, direct serial link or modem connection is used for this purpose. The UPS can also be monitored on the Internet using the GE IRIS system.



IRIS

GE UPS software products

- Data protection software for multiple operating systems
- UPS management software, including integration
- Web based remote monitoring and diagnostic services

Service for mission critical power

Whether you are a large corporation with multiple sites or a small business owner with a single location, GE will enable you to have a constant supply of clean and reliable power to keep your business up and running. GE offers a comprehensive portfolio of power quality services including:

- UPS installation and start-up, upgrades, spare parts and on-site services
- Battery installation, management and maintenance
- Power grounding
- Harmonic analysis
- Remote monitoring & diagnostics
- Global preventative and corrective services
- Training

technical specifications

Model	LP 3-11	LP 5-11/ LP 5-31T	LP 6-11/ LP 6-31T	LP 8-11/ LP 8-31T	LP 10-11/ LP 10-31T	LP 8-31	LP 10-31	LP 15-31	LP 20-31	LP 10-33	LP 20-33	LP 30-33
Rating (kVA / kW)	3/2.4	5/4	6/4.8	8/6.4	10/8	8/6.4	10/8	15/12	20/16	10/10	20/20	30/30
Battery (V/Ah)	144/7	240/7	240/7	240/12	240/12	2x240/7	2x240/7	2x240/14	2x240/14	2x240/7	2x240/14	2x240/21
Typical backup time 50 / 100% load (min.)	25/10	25/10	20/8	29/11	22/8	35/14	25/10	30/13	25/10	26/10	26/10	26/10
Enclosure	A	A/B*	A/B*	C/D*	C/D*	E	E	E	E	F	F	G
Net weight incl. batt. (kg)	85	110/180*	115/185*	165/270*	170/275*	240	240	345	350	247	372	520
Input voltage (Vac)	172-285	172-285/ 340-470*	172-285/ 340-470*	172-285/ 340-470*	172-285/ 340-470*	300-470	300-470	300-470	300-470	324-478	324-478	324-478
Input power factor	.99	.99	.99	.99	.99	.95	.95	.95	.95	.98	.98	.98
Input frequency (Hz)	40-70	40-70	40-70	40-70	40-70	45-65	45-65	45-65	45-65	45-65	45-65	45-65
Output voltage (Vac)	220/230/240 (user selectable)									380/400/415 (user selectable)		
Output voltage regulation	+/- 1%											
Output frequency (Hz)	50/60											
Environment	IP20 (IEC 60529)											
Humidity	95% non-condensing											
Ambient operating temperature	0 - 40 °C (32 - 104 °F)											
Audible noise	40-55 dB(A) load and temperature dependent											
Standards safety	EN 50091-1; EN 60950; IEC 950											
Protection degree	IP20											
Standards EMC	EN 50091-2 / IEC 62040-2											
ECO mode	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SBM**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Boost charging	✓	✓	✓	✓	✓							
Potential free contacts	optional	optional	optional	optional	optional	✓	✓	✓	✓	✓	✓	✓
RS232	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RPA (optional)	✓	✓	✓	✓	✓					✓	✓	✓
Plug-in SNMP card (optional)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Battery extension (optional)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Backfeed protection	optional	optional/✓*	optional/✓*	-/✓*	-/✓*	✓	✓	✓	✓	✓	✓	✓
Separate bypass input						✓	✓	✓	✓	optional	optional	optional
JUMP DataShield™	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
JUMP Manager™ (optional)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IRIS (optional)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

enclosures (hxwxd, mm)

A: 537 x 313 x 590
B: 855 x 313 x 590
C: 680 x 313 x 720
D: 995 x 313 x 720
E: 1190 x 410 x 890
F: 1310 x 500 x 780
G: 1310 x 660 x 780

LPX-11 = Single phase in/single phase out
LPX-31 = Three phase in/single phase out
LPX-33 = Three phase in/three phase out
X = kVA rating
T = Transformer

* = LP-11/ LP-31T respectively
** = Superior Battery Management

Specifications subject to change without prior notice

Certified Quality System
SQS
ISO 9001 / EN 29001
Reg. No. 10448

CE

CELCO
Energía 100% confiable
DESDE 1978

GE imagination at work

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