

LX (IT) Series

1~1Phase & 3~1Phase UPS

6KVA-10KVA (1:1)

10KVA-30KVA (3:1)



About the LX (IT) Series

Perpetual Power LX (IT) Series is a high-efficiency, single-phase UPS solution engineered to deliver up to 90% active power output with an impressive efficiency of up to 96.54%. Designed for critical power applications across various industries, it ensures reliable protection for sensitive equipment and uninterrupted power supply during outages. The LX IT Series stands out with its robust architecture, user-friendly design, and integrated ABM (Advanced Battery Management) technology, which enhances battery life and system performance. With long backup capability and ease of operation, it is the ideal choice for IT, telecom, medical, and industrial environments requiring continuous and stable power.

Key Features LX (IT) Series

- Single/single-phase, three/single-phase model switch on-line double conversion technology
- DSP (Digital Signal Processors) technology
- Suitable for all kinds of loads (resistive, inductive and non-linear loads etc)
- High overload capability (up to 150%)
- By pass dual DSP control design to enhance more reliability (06-30KVA)
- Supports dual input, hot standby in series
- Redundant & parallel able with advanced parallel current-sharing control technology
- Cold start and mains start function
- High charging capability: 2A/4A/6A/8A/10A/12A selectable (standard), 14A/16A/18A/20A/22A/24A selectable (options)
- Standard configuration input isolation transformer.
- Superior protection (surges, short-circuit, over voltages, under voltages, overcharge, reverse connection protection etc.)
- Advanced communications (RS232 and USB ports (standard), SNMP, dry contacts and RS 485(options)
- Other options (parallel kits, input isolation transformer, bypass isolation transformer and harmonic suppressor)

Key Technologies

- Online Double Conversion technology for uninterrupted power supply
- DSP (Digital Signal Processor)-based control for enhanced performance and reliability
- Dual DSP Control Design (06-30KVA) for increased system redundancy
- Advanced Parallel Current Sharing Control enabling redundant parallel operation

Rear Panel

- Ac input socket
- Battery connector (optional)
- Fan (optional)
- USB (optional)
- EPO (optional)
- RS232
- Intelligent slot
- Output sockets

Optional Outlets

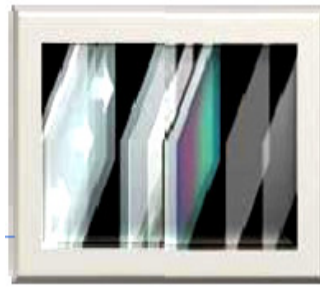


Benchmark Design – LX (IT) Series

The LX (IT) Series from Perpetual Power is built as a pedometrical benchmark in power system design, engineered to perform reliably in a wide range of environmental and operational conditions. It features a clear LCD + LED display, along with multi-functional control keys and a user-friendly Human-Machine Interface (HMI) that ensures easy operation and real-time monitoring. The UPS supports advanced multi-platform communication, making it compatible with modern IT and industrial systems. Additionally, strategically placed air vents on the front and side panels enhance cooling efficiency and maintain optimal internal temperatures-ensuring long-term performance and reliability.



**Complete system
superior by
Microcontroller**



Display LCD+LED



UPS ON Display View



HMI Technology



**Controlled FAN by
Micro controller**



**Smart Air
Vent Cabinet**

Tremendous Benefits – LX (IT) Series

The LX (IT) Series from Perpetual Power offers a wide range of significant benefits, making it a smart and reliable choice for protecting your critical equipment. First and foremost, it provides robust protection against utility power failures, ensuring uninterrupted power supply to sensitive devices such as computers, servers, and network equipment. These systems are increasingly vulnerable to power disturbances that can cause data loss, equipment damage, or costly downtime. Designed with Advanced Battery Management (ABM) and high-efficiency architecture; the LX IT Series improves system performance, extends battery life, and reduces operational costs. Most importantly, it combines quality, reliability, and affordability, making it one of the most ECO nominal UPS solutions available in its class—without compromising on performance or safety.

Power & Load Handling

- Suitable for all types of loads – including inductive and nonlinear loads
- High Overload Capability: Handles up to 150% load
- Supports Dual Input & Hot Standby configuration in series
- Cold Start & Mains Start functionality
- High Charging Capability: Selectable charging current options –
 - 2A, 4A, 6A, 8A, 10A, 12A
 - Optional: 14A, 16A, 18A, 20A, 22A, 24A

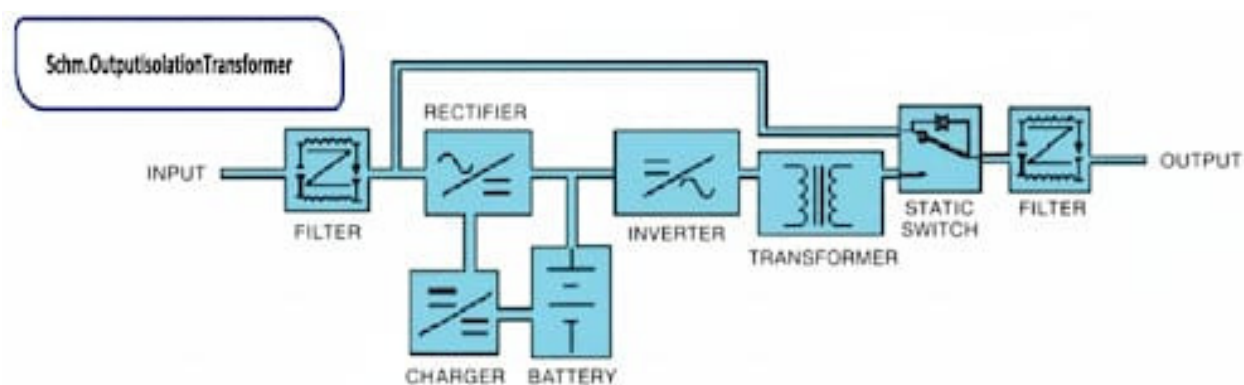
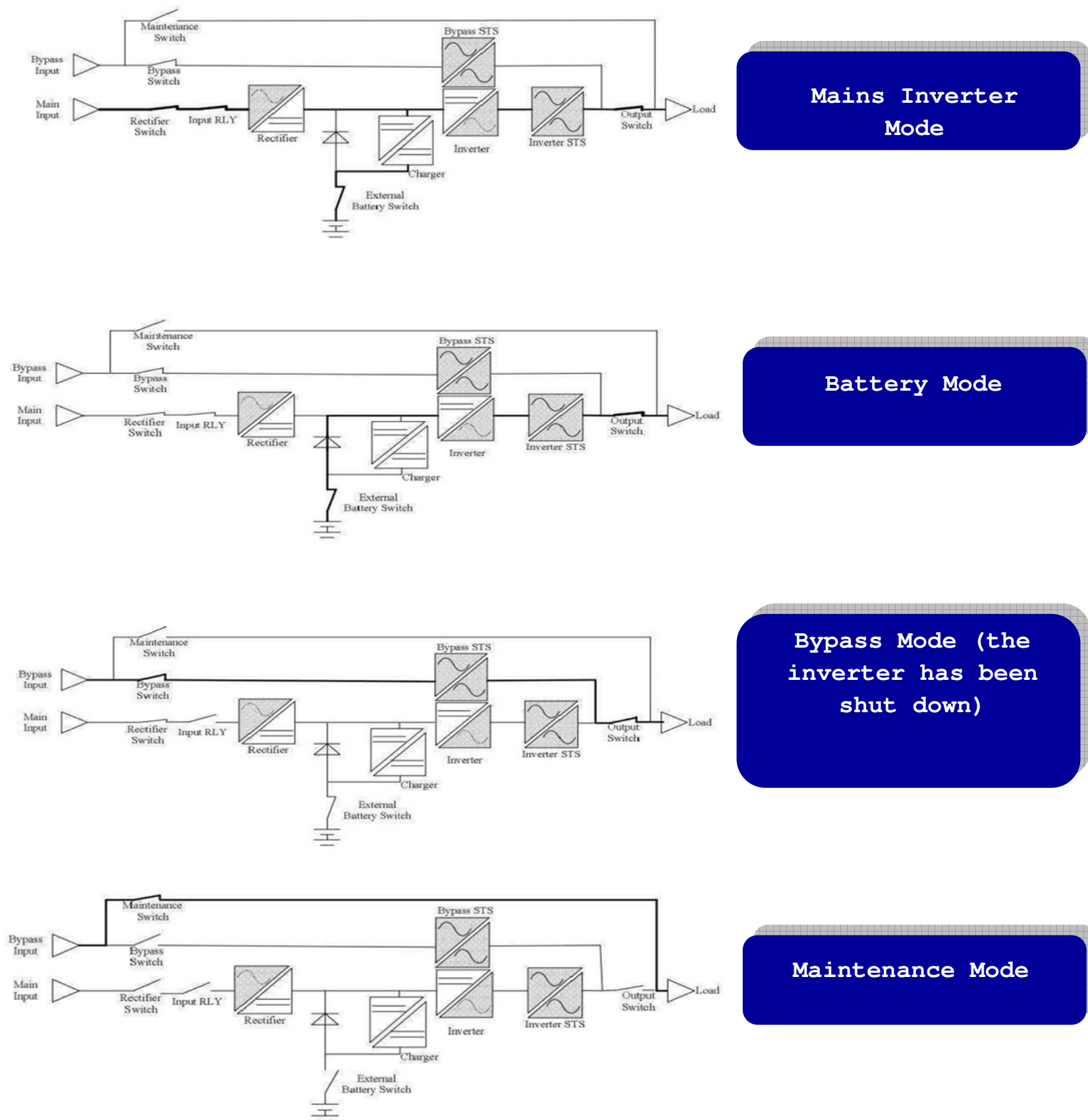
Build & Safety

- Comes standard with Output Isolation Transformer
- Superior Protection against:
 - Surges
 - Short circuits
 - Over/under voltages
 - Overcharge
 - Reverse battery connection
- Optional accessories:
 - Parallel Kits
 - Input Isolation Transformer
 - Bypass Isolation Transformer
 - Harmonic Suppressor

Communication & Control

- Advanced Communication Interfaces:
- RS232
 - USB
 - SNMP (optional)
 - RS485
 - Dry Contacts
- Emergency Power Off (EPO) switch for safety
 - Fan-cooled system with integrated circuit breaker
 - International Market Compatible Terminal Design

LX (IT) Series-Operation Mode feature- Schematic Diagram



Technical Specification

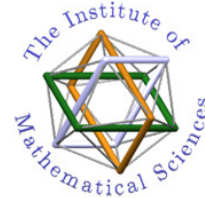
MODEL	LXIT11 6E	LXIT11 10E	LXIT31 10E	LXIT31 15E	LXIT31 20E	LTIT31 30E
CAPACITY	6 KVA	10 KVA	10 KVA	15 KVA	20 KVA	30 KVA
INPUT						
Phase	Single Phase With Ground		Three Phase +N+PE			
Rated Voltage	208 / 220 / 230 / 240 VAC		380 /400 /415 VAC			
Voltage Range	165~275 VAC		285~475 VAC			
Frequency Rate	50Hz / 60Hz					
Frequency Range	40~70Hz (Auto-Sensing)					
Power Factor	≥0.99 @ Nominal Voltage (100% Load)					
Frequency Tracking Range	±5% Hz					
OUTPUT						
Voltage Range	220/230/240 VAC (Single Phase+N+PE)					
Voltage Regulation	±1%					
Frequency-Synchronized Range	45~55 Hz or 55~65 Hz					
Frequency-Online mode	Mains Mode Track Bypass Input in the State Of Synchronization Battery Mode 50 / 60Hz ± 0.1Hz					
Waveform	Sinusoidal					
Power Factor	0.9 / 1.0 (Optional)					
Total Harmonic Distortion (THDv)	≤ 1% (Linear Load), ≤ 3% (Non-Liner Load)					
Recovery Time of Transient Voltage	<30 ms					
Crest Factor	3:1					
Overload	Load ≤105% Long Time Running ,105% < Load ≤ 125% for 10 Min 125% < Load ≤ 150% For 1 Min, 150% < Load ≤200% For 200 ms 200% < Loads for 100 ms					
BYPASS						
Rated Voltage	220 / 230 / 240VAC (Single Phase+N+PE)					
Overload	Load Current < 150% Rated Current Long Time Running 150% ≤ Load Current <200% for 1 Min. 200% Rated Current Load Current for 200 ms					
BATTERIES						
Features	External					
Type	VRLA AGM Sealed Lead Acid Maintenance Free Battery					
Capacity	Up to 200 AH					
Numbers	10 Pcs – 20 Pcs Settable		16 Pcs – 20 Pcs Settable			
DC Voltage	120 VDC~240 VDC		192 VDC~240 VDC			
Charging Current	Default 8A(2A/4A/6A/8A/10A/12A Selectable), 14A/16A/18A/20A/22A/24A Selectable Options (6KVA-30KVA)					
Charging Output VDC	13.5					
	± 0.6 / Pcs					
EOD (End of Discharge)	10.5 VDC / Pcs					
Typical Recharge Time	Standard Model 90 % Capacity Restored in 3 Hours Long Run Model Depend on the Capacity Of Battery					
SYSTEM						
Efficiency	≥90% (Online Mode)					
Transfer Time	0 ms					
Transformer	Inbuilt Output Isolation Transformer					
Quality/Security	ISO9001:2015, ISO14001:2015, ISO 27001:2013, ISO45001:2018. ROHS					
DISPLAY CONTROL						
Display	LCD+LED					
Settable Via LCD	Output Voltage, EOD, Auto-Start, Bypass Mode, ECO Mode and Frequency Conversion Mode					
Control Technology	DSP (Digital Signal Processors)					
MANAGEMENT-CONTROL AND COMMUNICATION						
Output Terminal	Indian Standard Type D (3pin) Grounded and Type G.M.N.O. for International Market Standard)					
Protections	Short-Circuit, Over Load, Over Temperature, Battery Discharge Protection and Fan Testing Protection, Surge Protection (For Network / Fax / Modem)					
SMART RS-232	Supports Windows2000 / 2003 / XP / Vista / 2008, Windows 7 / 8 / 10, Linux and MAC					
USB/RS-485						
Optional SNMP	Power Management from SNMP manager and Web Browser					
Interface	Bit rate 2400bps / Byte 8bit / Completion Code 1bit					
ENVIRONMENT						
Operating Humidity	0~95% RH @ 0~45°C (Non-Condensing)					
Storage Temperature	-25°C ~ 55°C (Exclude Batteries)					
Operating Altitude	≤1000m De rating 1% For Each Rising 100m					
Ingress Protection Rating	IP20 / IP21					
MTBF (Mean Time Between Failures)	MTBF > 200000 h					
MTTR (Mean Time To Repair/Recovery)	MTTR < 0.5 H					
Noise Level at 1m	≤50 d BA (at 1 M)					
PHYSICAL						
Dimensions (mm) (WxDxH)	210x585x590		310x600x880		400x815x1100	
Packaged Dimensions (mm) (WxDxH)	328x716x805		430x710x1080		525x925x1305	
Net Weight (kg)	54	54.5	130	140	210	280
Gross Weight (kg)	64	64.5	138	153	225	295

**Accuracy weight ± 200gm

**Accuracy Dimension ± 20mm

- Specifications are subject to change without notice.
- Due to regular upgrade on picture and actual product may vary
- Custom-made specifications are acceptable.

Our Clients





Contact Info

Head Office: #121/6, Sathnur Main Road, Near Country Club, Sathnur,
Bangalore - 560064

Registered Office: #40/102, L.G.F, C.R.Park, New Delhi - 110019

Email: ajeet@perpetualpowerups.com

Phone: +91 984 5271 112 Toll Free No: 1800 569 1663