

## PPX Series 3KVA–30KVA

IGBT & ITX Base UPS  
3KVA–10KVA, 1Øin & 1Ø OUT  
10KVA–30KVA, 3Øin & 1Ø OUT



## About the PPX Series

Perpetual Power proudly presents the PPX Series — a Made-in-India high-performance UPS solution, designed for critical power applications across various industry segments. The PPX Series features a galvanized output isolation transformer for superior electrical safety and a high-efficiency IGBT-mounted inverter. This advanced single-phase UPS system delivers up to 90% active power output and achieves up to 96.54% efficiency, making it ideal for sensitive and high-demand equipment. With architecture built on the foundation of our successful DX Series, the PPX Series integrates

## Advanced Features & Benefits

- Reliability & sustainability built for long-term durability and performance, the PPX Series supports sustainable energy usage while maintaining high uptime reliability.
- Double Benchmark Designed Power System engineered with dual-benchmark architecture to ensure consistent, high-quality power output across all conditions.
- HRC Safety Device (High Rupturing Capacity Fuse) Incorporates HRC fuses for enhanced safety and protection against over current or short-circuit conditions, ensuring secure operation.
- i<sup>2</sup> Technology (Intelligent Inverter Technology) Advanced inverter technology ensures efficient power conversion, smart load management, and real-time system optimization.
- Advanced Battery Management (ABM) Technology
- Robust design and durable construction
- User-friendly operation
- Extended backup performance
- Cost-Effective & Economical offers industry-leading performance at an affordable price point, making it an ideal solution for businesses seeking both quality and value.

The PPX Series stands out for its reliability, efficiency, and ease of use, making it the preferred choice for mission-critical environments.

## I<sup>2</sup>–Technology Design – PPX Series

The PPX Series, powered by i<sup>2</sup>-Technology, sets a pedometrical benchmark in smart power solutions, engineered for seamless performance in diverse environments. Equipped with a dual-display interface featuring both LCD and LED indicators, it delivers clear system status updates and intuitive operation. Multi-function keys and an ergonomic Human-Machine Interface (HMI) make configuration effortless. With advanced multi-platform communication capabilities, the PPX Series integrates smoothly into a wide range of systems and network environments. Its strategically positioned front and side air vents ensure efficient heat dissipation, enabling continuous and reliable operation even under demanding conditions.



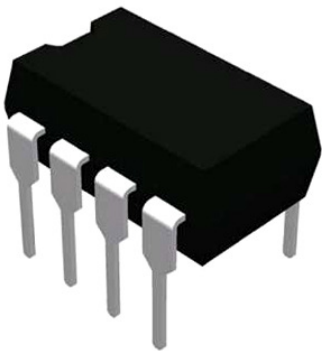


## High Reliability Design

The PPX Series employs a double-conversion online architecture, delivering a pure sine wave output with precise frequency tracking, phase locking, and voltage regulation. This advanced design neutralizes power fluctuations and minimizes load distortion, ensuring stable, clean power for connected equipment. By maintaining a consistent, interference-free output, the PPX Series provides comprehensive protection for sensitive and mission-critical devices, making it the ideal choice for environments where reliability is paramount.

## Strong Overload Protection with ITX Technology

The PPX Series is equipped with ITX – Built-in Isolation Transformer Technology, delivering robust protection against overloads and electrical disturbances. This integrated isolation transformer enhances the system's anti-interference capability, providing a clean and stable power supply even in harsh electrical environments. It also ensures superior isolation between input and output, safeguarding connected equipment from surges, spikes, and electrical noise. With comprehensive protection mechanisms, the PPX Series is ideal for sensitive and mission-critical applications requiring high resilience and reliability.



## Wide Input Range for Enhanced Efficiency

The PPX Series supports a wide AC input voltage range of 230V/415V, significantly reducing unnecessary battery usage during input fluctuations. This not only improves operational efficiency but also helps to extend battery lifespan. In addition, the wide input frequency range ensures seamless compatibility with all types of generators, making the PPX Series a reliable choice for both utility and backup power environments.

## Comprehensive and Reliable Protection

The PPX Series is engineered with multiple layers of protection to ensure maximum system stability and reliability. It safeguards both the UPS and connected equipment from:

- Overload
- Short Circuit
- Battery Overvoltage/Under voltage
- Battery Overcharge

In the event of a UPS fault, the built-in static bypass switch automatically transfers the load to bypass mode, ensuring uninterrupted power supply and preventing downtime. This intelligent design maintains continuous operation and protects your critical systems at all times.





## Advanced IGBT Technology for Enhanced Performance

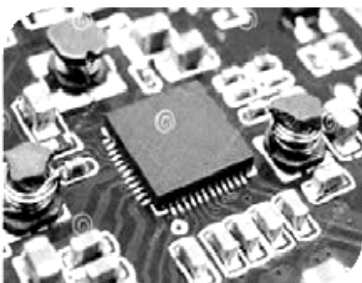
The PPX Series adopts advanced IGBT-based inverter and charger technology, coupled with a high-efficiency isolation transformer. This combination significantly enhances the systems:

- Reliability
- Energy efficiency
- Load adaptability

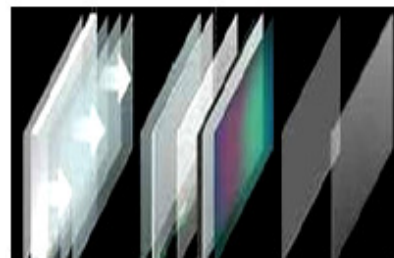
The use of high-performance switching components ensures smooth power conversion, reduced losses, and better handling of complex or sensitive loads. This makes the PPX Series an ideal choice for environments demanding stable and resilient power delivery.

## Tremendous Benefits of the PPX Series

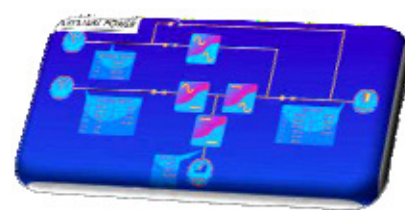
The PPX Series from Perpetual Power offers numerous critical advantages, making it an ideal choice for reliable and efficient power protection. First and foremost, the UPS provides strong protection against utility power failures, helping to safeguard sensitive equipment such as computers, servers, and networking devices from potential damage caused by power interruptions, voltage fluctuations, and electrical surges. In today's environment where power-related issues are increasing at an alarming rate—having a dependable backup system like the PPX Series is more important than ever. The PPX Series delivers this protection while maintaining an excellent balance of affordability and quality, making it one of the most cost-effective and trusted solutions in its class.



Complete system  
superior by  
Microcontroller



Display LCD+LED



HMI- Technology



Smart Air Vent Smart  
Air Vent UPS

## Applications





## Technical Specification – Built-in Isolation Transformer with IGBT Technology

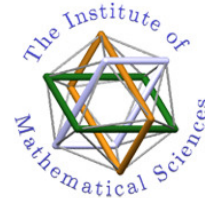
MODEL	PPX1 3E	PPX1 5E/1 6E	PPX1 8E	PPX1 10E	PPX3 1 10E	PPX3 1 15E	PPX3 1 20E	PPX3 1 25E	PPX3 1 30E
CAPACITY	3 KVA	5 KVA / 6 KVA	8 KVA	10 KVA	10 KVA	15 KVA	20 KVA	25 KVA	30 KVA
INPUT									
Phase	Single Phase with Ground				Three Phase +N+PE				
Rated Voltage	208 / 220 / 230 / 240 VAC				380 / 400 / 415 VAC				
Voltage Range	135~285 VAC				250~495 VAC				
Frequency Rate	50Hz / 60Hz								
Frequency Range	40Hz - 70Hz (Auto-Sensing)								
Power Factor	≥ 0.98								
Frequency Tracking Range	± 5% Hz								
OUTPUT									
Voltage Range	220 / 230 / 240 VAC (Single Phase+N+PE)								
Voltage Regulation	± 1% (Static), ± 2% (Typical)								
Frequency-Synchronized Range	45Hz - 55Hz or 55Hz - 65Hz								
Frequency-Online Mode	Mains Mode Track Bypass Input in the State Of Synchronization Battery Mode 50Hz / 60Hz ± 0.1Hz								
Wave Form	Sinusoidal								
Power Factor	0.9/1 (Optional)								
Total Harmonic Distortion (THDv)	≤ 1% (Linear Load) ≤ 3% (Non-Liner Load)								
Crest Factor	3:1								
Overload	100% < Load ≤ 125% for 10 Min 125% < Load ≤ 150% for 60 Sec.								
BATTERIES									
Features	External								
Type	Tubular / VRLA AGM Sealed Lead Acid Maintenance Free Battery								
Capacity	Up to 400AH								
Numbers	10 Pcs – 16 Pcs Settable				16 Pcs - 32 Pcs Settable				
Dc Voltage	96 VDC - 192 VDC (Settable)					192 VDC – 384 VDC (Settable)			
Charging Current	4 Amp - 40 Amp (Settable)								
Charging Voltage	13.5 ± 0.6 / Pcs								
EOD Voltage	10.5 VDC / Pcs								
Typical Recharge Time	Standard Model 90% Capacity Restored in 8 Hours ; Long Run Model : Depend on the Capacity of Battery								
SYSTEM									
Efficiency	≥ 90% (Full Load)								
Transfer Time	≤ 0 ms								
Transformer	Inbuilt Output Isolation Transformer								
EMC (Electromagnetic Compatibility)	CISPR 22 CLASS A								
Quality /Security	ISO9001:2015, ISO14001:2015, ISO 27001:2013, ISO45001:2018, ROHS								
DISPLAY CONTROL									
Display	LCD+LED								
Control Technology	DSP (Digital Signal Processors)								
ENVIRONMENT									
Operating Humidity	0 - 95 % RH @ 0 - 45°C (Non-Condensing)								
Storage Temperature	-25°C - 55°C (Excluding Batteries)								
Operating Altitude	≤1000 Mode Rating 1% For Each Rising 100m								
Ingress Protection Rating	IP20 / IP21								
Noise Level at 1m	≤50 dB A (at 1M)								
PHYSICAL									
Dimensions (mm) (WxDxH)	280 x 585 x 655					380 x 815 x 1050			
Packaged Dimensions (mm) (WxDxH)	330 x 630 x 700					430 x 865 x 1100			
Net Weight (Kg)	40	55/60	75	85	100	120	135	170	185
Gross Weight (Kg)	50	65/70	85	98	118	135	150	180	200

**\*\*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







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