ACT GREEN

www.pceups.com

MXL

10kVA~30kVA

- True on-line double conversion design
- Fully digitized microprocessor control
- N+1 parallel redundancy configuration*
- Up to 3 units connected in parallel*
- Hot-standby capability
- Redundant auxiliary power
- Input Power Factor Correction (PFC)
- Pure sinewave output with less than 3% THD
- Wide input voltage range
- On-line output voltage range
- High Efficiency mode selectable
- Cold Start function (DC power on)
- Galvanic isolation transformer*
- Generator compatible
- Manual and static bybass switch
- Remote Emergency Power Off function (EPO)
- Advanced Battery Management (ABM)
- Automatic diagnostics & battery check
- Display of battery remaining time
- Battery replacement warning
- Multi-function LCD interface
- History record of power failure events
- RS-232, AS-4oo, dry contact communication port
- SNMP management capability*
- Software monitoring & control

*For optional features

YOUR ULTIMATE

POWER PROTECTION PARTNER

PCE UPS SYSTEMS

Product introduction

The MX/MXL UPS is now available from 15kVA to 30kVA in both single and three-phase output versions and is compatible with a wide range of battery autonomies, This means that the HP Series is ideal for all company sizes and requirements. The true on-line intelligent double conversion design of the HP UPS enables it to act a secure power infrastructure that guarantees the delivery of the highest power quality to your loads.

The MX/MXL UPS provides a multitude of features allowing it to meet the diverse requirements that an organization might have: it provides high tolerance to input voltage and frequency fluctuations while supplying a pure sine wave output with less than 3% of Total Harmonic Distortion (THD).

The MX/MXL UPS is designed with high-availability in mind. For this reason, it comes packed with features that allow it to keep operating under a variety of possible power disruptions.

Functions and Features

The MX/MXL Series UPS boasts a true on-line design providing power to your sensitive electronic equipment without any interruption whatsoever. In addition, the HP Series UPS is fully adaptable to meet any specific need for power, battery back up time and redundancy.

The MX/MXL Series Ups can be fully integrated with PCE's static switch assembly. This setup provides additional protection against possible problems in the power distribution system by immediately switching to AC mains in the unlikely event of a fault within the UPS system itself.
Further features include:
- Galvanic isolation transformer

- Automatic input frequency detection enables operation at 50 Hz or 60Hz

- A wide acceptable input voltage range reduces the frequency of battery discharges

- A power factor corrected input and a high frequency pulse width modulated inverter which give the UPS excellent performance characteristics in a compact design

- A Battery start switch which allows UPS to power up and provide stable AC current without having mains power available.

- A battery charger which guarantees the reliability of the battery over time and offers back up extension for numerous hours.

- The ability to connect one or more external cabinets whenever extended back up times are required

- RS-232, AS-400, and status interface, include as standard features to allow for communication with all types of computers

- An optional SNMP interface card that can be used for network-based communication, monitoring, and control

- A state-of-the-art microprocessor technology featuring self-diagnosis and a multilingual LCD message display to provide operation and status information

- A Static bypass supply incorporates surge suppression and an EMI filter

- Automatic restart, which functions as follows:
1- After a low-battery shutdown event, the UPS automatically starts in inverter mode when the AC line returns

2- After clearing an overload condition, the UPS automatically switches from static bypass to inverter mode

- An "alarm cancel" functionality which allows for switching off the audible alarm and indicative lights in the event of a long back up time

- An optional "Economy Mode": When the input voltage is within the rating voltage range (±10%), the UPS works in the bypass mode for more efficiency. In other cases, the UPS switches to inverter mode.

- Auto-detection of the bypass mode voltage: The protection radnge is typically -30% ~ +30% (different ranges are selectable). When the bypass voltage is beyond protection range, the UPS will supply no output power to the load.

Leading Technology

The PCE MX/MXL Series UPS uses an intelligent double conversion technology to provide secure power architecture for your mission-critical applications. This feature ensure the highest levels of voltage and frequency regulations and is the only quality in the incoming electricity is low.
Your MX/MXL Series UPS will help your organization by:

- Providing high tolerance to voltage and frequency fluctuations

- Providing low network emission and ensuring no disruption to your systems and processes

- Providing advanced battery care to ensure superior performance and extend the life of your UPS batteries

- Absorbing active power and resulting in significant saving (for PFC units).

Reliability

The MX/MXL Series UPS ensure that the energy supplied to your load is of the highest quality, enabling it to function in a truly redundant hot-standby solution. Hot-standby allows an additional MX/MXL to act as back up in order to provide 100% redundancy in the unlikely event of a unit failure.

Communication & Monitoring

The MX/MXL Series UPS is fitted with RS-232 & AS-400 computer interface. A Liquid Crystal Display (LCD) provides clear multilingual information on various operating parameters.

The MX/MXL Series UPS is fully compatible with PCE's suite of connectivity solutions, allowing you to preserve critical data and perform a controlled shutdown of equipment in the event of a power disturbance.

The MX/MXL Series family is fully compatible with PowerTrack.net TM software platform. PowerTrack.net TM is the nearest you can get to having a PCE engineer permanently located at your site. The PowerTrack.net TM platform provides the following:

- Continuous real-time monitoring of your UPS

- Automatic transmission of daily status reports

- Real-time diagnosis of all the UPS's operational parameters

- Remote-fix capability

- Monthly UPS operational status reports

- Technical advice regarding the operation of your UPS

- Easy access to all the data collected from the UPS system

- Power Quality Monitoring to effectively monitor power disturbance trends.

Applications

The MX/MXL Series provides a secure and reliable power infrastructure for a wide range of applications including:
- Commercial Processing Sysytem
- Storage Area Networks (SAN)
- Control Systems
- Broadcasting and Telecommunications System
- Data Centers

Advanced Battery Care

The MX/MXL Series UPS employs unique technologies to increase the life of the batteries

Here at PCE UPS Systems Inc., we never tire of emphasizing the importance of the batteries. Battery reliability and replacement costs are among the most important factors to be considered when choosing a UPS. For this reson, we have always paid the utmost attention to the batteries we employ in our solutions. In addition, we have equipped the MX/MXL Series with the capability to continuously monitor your power status and operate with extreme efficiency accordingly. Such mechanisms increase the system's battery life by up to 60%.

The following are some of the batter-life saving features:
- Wide input voltage acceptance range (up to 30%)
- Temperature-compensated battery charger
- Intelligent battery charger
- Charge and discharge cycle control
- End of discharge voltage compensated with time
- Minimum ripple current values
- Algorithm to calculate battery life expectancy
- Periodic battery testing

All these features put together sum up to considerable saving in your running costs.

Secure Power at all times

Supplying you with a UPS alone will never deliver the level of business protection and continuity that you require. For this reason, PCE UPS Systems offers you a range of maintenance plans which would:

- Help deliver reliability to your load
- Extend the life of your power protection equipment
- Optimize your capital expenditure
- Provide a proactive approach to disaster recovery
- Help to control your business environment
- Provide efficient risk management at a affixed cost

Please contact your local PCE ales office or visit our website at www.pceups.com for more information.

Technical Specifications
MXL Series

Model			MXL 10K33	MXL 15K33	MXL 20K33	MXL 30K33
Phase			3-phase in / 3-phase out			
Capacity PF 0.8			10000VA	15000VA	20000VA	30000VA
			8000W	12000W	16000W	24000W
Input	Nominal Voltage		3 x 400 VAC (3Ph+N)			
	Input Voltage Range		285-478 VAC (3-phase) at 100% load; 175-520@50% load			
	Frequency Range		40~70 Hz			
	Power Factor		≥ 0.99 @ 100% Load			
Output	Output Voltage		3 x 400VAC (3Ph+N)			
	AC Voltage Regulation (Batt. Mode)		± 1%			
	Frequency Range (Synchronized Range)		40~70 Hz			
	Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz			
	Current Crest Ratio		3:1 (max.)			
	Harmonic Distortion		≤ 2 % THD (Linear Load) ; ≤ 5 % THD (Non-linear Load)			
	Transfer Time	AC Mode to Batt. Mode	Zero			
		Inverter to Bypass	Zero			
	Waveform (Batt. Mode)		Pure Sinewave			
Protection & Filtering	Overload protection		≤104% continuous, ≤125% for 10 minutes, ≤150% for 60 seconds, >150% for 5 seconds			
	Short Circuit Protection		UPS output cut off immediately / fuse / circuit breaker / electronic protection			
System Display warning	LCD indicators		Input/output voltage, input/output freq., on-line mode, back up mode, batt. capacity, load level, inside temperature, fault status			
	LED indicators		Rectifier I/P, bypass I/P, inverter, O/P, on-line mode, back up mode, bypass mode			
Efficiency	AC Mode		95%	95%	95%	96%
	Battery Mode		92%	92%	92%	93%
Battery	Battery Type		Depending on the capacity of external batteries			
	Numbers					
	Charging Voltage		273 VDC ± 1%			
Indicator	LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault			
Alarm	Battery Mode		Sounding every 4 seconds			
	Low Battery		Sounding every second			
	Overload		Sounding twice every second			
	Fault		Continously sounding			
Physical	Dimension, D x W x H (mm)		592 x 250 x 826	592 x 250 x 826	592 x 250 x 826	815 x 250 x 826
	Net Weight (kgs)		38	40	40	64
Environment	Humidity		0-95 % RH @ 0- 40°C (Non-condensing)			
	Noise Level		Less than 52dB@1 Meter	Less than 55dB @ 1 Meter		
Management	Smart RS-232 / USB		Software Supports Windows Family, Linux, Sun Solaris, IBM Aix, Compaq True64, SGIIRIX, FreeBSD, HP-UX, MAC			
	Optional SNMP		Power management from SNMP manager and web browser			
Standards & Certifications	Performance		EN50091-3/IEC 62040-3			
	Safety		UL 1778, CE, EN 50091-1,EN 60950 (RD/), IEC 60950			
	EMC (EMS / EMI)		IEC 61000-4-2/-3/-4/-5/-6/-8/-11, IEC 61000-3-2/-3, FCC Part 15, CISPR 22, EN 50091-2/IEC62040-2 EN 55022/B,FCC 47 part 15 - Subpart B - Class A			
	Design, production, and services		ISO 9001			
	Environment		ISO 14001 certified company			
	Marking & Certifications		CE, TUV/GS, UL, cUL, c-Tick			

*When using internal batteries from 18-19, the unit will de-rate according to the below formula: P = PRating x N/20.
* L means long-run model.
* Product specifications are subject to change without further notice