NUMERIC®
A Group brand | legrand®

Keor MP

Three-Phase UPS
From 60 kVA to 200 kVA

INNOVATION
THAT DRIVES THE FUTURE

NEW ENERGY
TO POWER

www.numericups.com

UNLOCKING FUTURE POSSIBILITIES WITH Keor MP

Innovation is the cornerstone of our vision for a better future. It unlocks new possibilities, enabling us to enhance energy efficiency and improve system reliability. This unwavering commitment to innovation positions **Numeric** at the forefront of the power continuity industry.

With the introduction of the **Keor MP,** we extend this advantage to our customers, empowering them to remain ahead of the curve in their respective fields. A cutting-edge monolithic UPS system providing the reliability and efficiency necessary to meet the ever-growing demands of the future, today.


Keor MP
legrand
EPO
legrand

*INNOVATION THAT **DRIVES** THE **FUTURE***

Designed to drive the future with innovation, the **Keor MP** is a groundbreaking advancement in the power backup technology. This 3-phase online double conversion monolithic UPS, featuring a **module-based architecture** with **Three Level IGBT based Inverter technology** delivers **unparalleled efficency of up to 96%** in a **compact design**.

Integrated with **Li-ion battery technology,** a footprint that is up to **43% smaller than conventional UPS systems** and rapid scalability of up to **1.2MW,** the Keor MP ensures you are always ready to meet future demands, today. Advanced features coupled with a design that adapts to the diverse and evolving requirements of multiple sectors, makes Keor MP the ultimate solution for today and tomorrow.

FUTURE READY DESIGN

Module-Based Architecture for Low MTTR and High MTBF

Featuring a module-based architecture, the Keor MP significantly reduces Mean Time to Repair (MTTR). This allows for quick and efficient maintenance to ensure maximum operational uptime. It is engineered to provide redundancy with fault tolerance to enable seamless and reliable operations. The high MTBF further ensures consistent performance with minimal downtime.

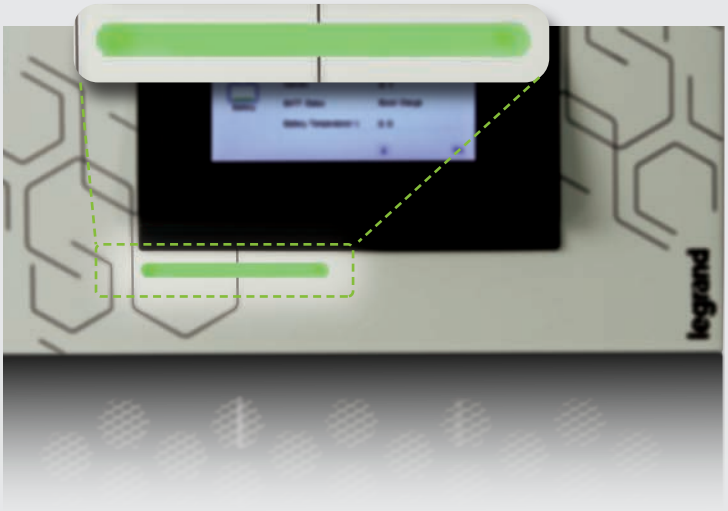
Li-Ion Battery Integration

The Keor MP is uniquely integrated with Li-Ion batteries in a way that allows for monitoring of the battery parameters and selecting the charging characteristics of the battery, from the UPS's screen itself. This ensures optimized battery management and efficient troubleshooting, thereby enhancing overall system performance and reliability.

FUTURE ENHANCED
INTERFACE & MONITORING

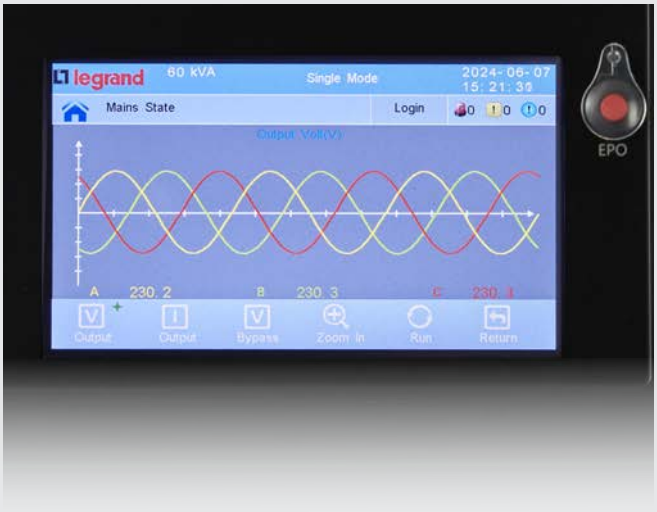
7" Multicolor Intuitive Touchscreen Display

The Keor MP features a user-friendly touchscreen display with graphical representations of system status and performance, ensuring instant visibility and seamless monitoring and control. Users can access real-time status indications, configure settings, and respond to alerts with ease.



Live Synoptic View for Real-Time Status Indication

With a LED status bar that provides clear real time indication for quick assessment and monitoring, Keor MP's live synoptic view ensures comprehensive status updates of the system's performance, enabling prompt detection and resolution of issues.

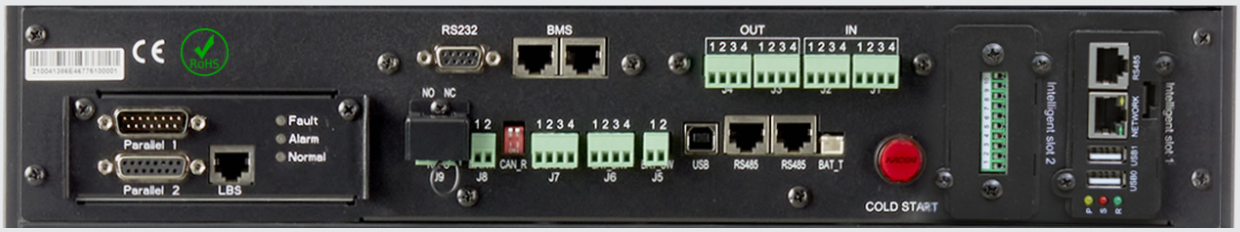


Real-Time Waveform Monitoring

Keor MP is designed to provide real-time waveform monitoring, assuring users of reliable power quality and uninterrupted business continuity, by promptly detecting and addressing any power anomalies.

Wide Communication Options

Supporting advanced communication protocols such as SNMP/BMS through RS 485, the Keor MP integrates smoothly into existing network environments. This capability enables remote monitoring, management, and seamless integration with Building Management Systems (BMS) for centralized control.



Dry Contact Cards for Signaling & Alerts

Integrated dry contact cards enable the Keor MP to send immediate signals and alerts for proactive maintenance and response to critical events. This enhances operational reliability by notifying users of any potential issues in real time.

FUTURE OPTIMIZED
TOTAL COST OF OWNERSHIP (TCO)

Three Level IGBT inverter Technology

Keor MP's unparalleled Three Level IGBT Inverter Technology reduces the switching losses significantly, through voltage reduction in IGBTs, diodes, and inductors, thereby lowering energy consumption which directly reduces total cost of ownership by minimizing operational expenses associated with power usage and maintenance.

Compact Footprint

The Keor MP drives future innovation with a compact footprint, effectively optimizing space utilization and reducing real estate costs. This efficiency in size not only maximizes available floor space but also integrates seamlessly into diverse environments, making it a practical choice for modern infrastructure needs without compromising on performance or reliability.

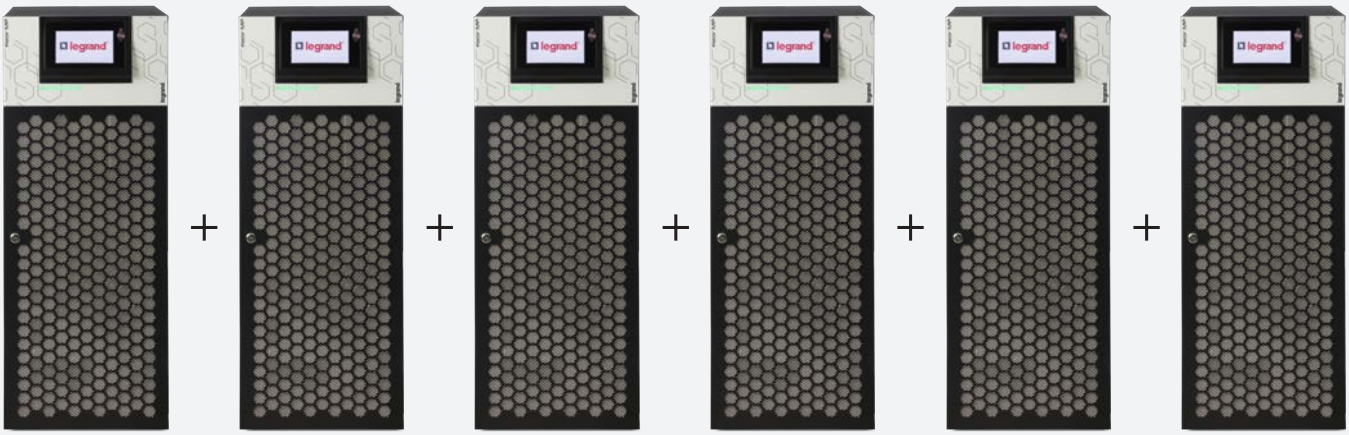
High Efficiency

Keor MP achieves up to 96% efficiency, even at lower loads, which not only significantly reduces operational costs but also aligns with sustainable energy goals.

Self-Loading Feature

The self-loading feature allows for on-site testing of UPS before connecting it to the load.

N + X Redundancy



Keor MP allows N+X redundancy up to six UPSs in parallel operation and is scalable up to 1.2MW, effectively reducing the risk of downtime.The Load Bus Synchronization (LBS) allows the UPS to be connected with two different sources.

FUTURE ENSURED
SAFETY & PROTECTION

Integrated Molded Case Circuit Breaker (MCCB)

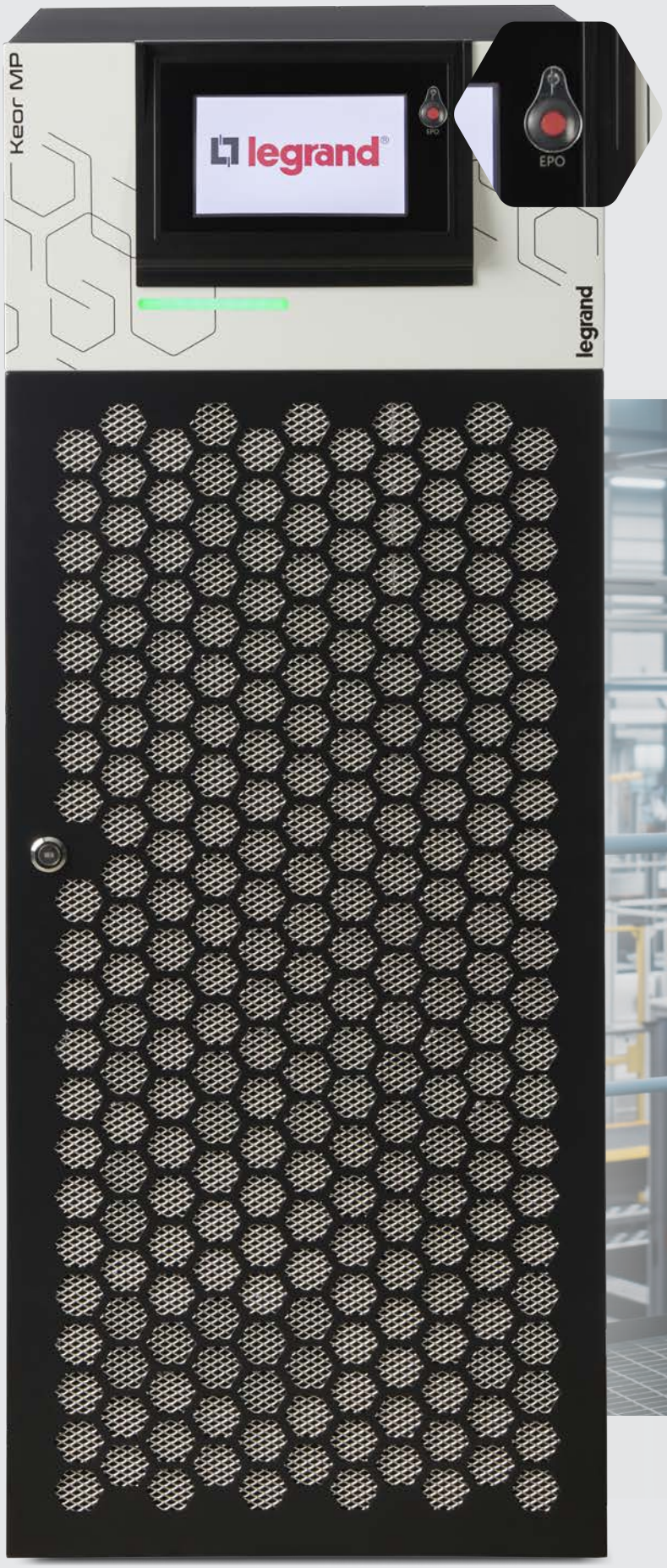
The integrated Legrand's MCCB, offers best in class protection for the connected loads, ensuring safe operation, setting a benchmark in protection and performance standards in critical power applications.

Input Phase Sequence Correction

The Input Phase Sequence Correction feature in Keor MP enhances protection and safety allowing the UPS to function on mains power without going to the battery mode.

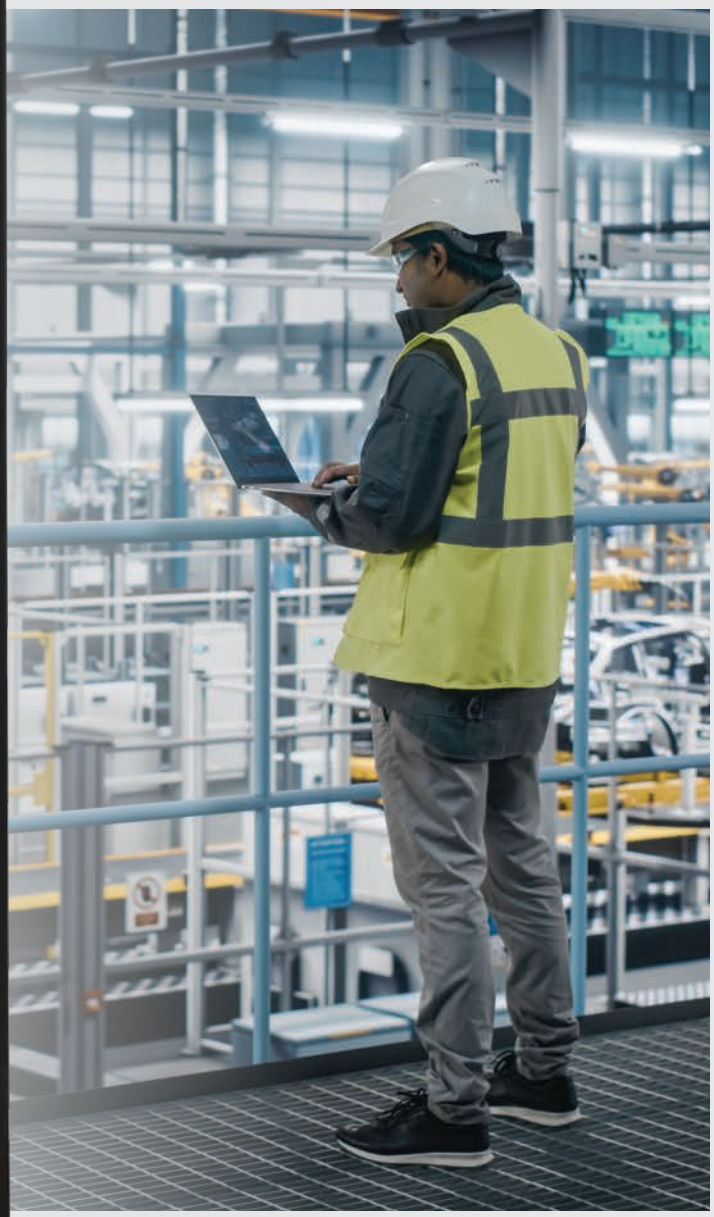
Back Feed Protection

Equipped with back-feed protection as per IEC 62040-1 UPS standard, Keor MP prevents the flow of energy back to the source and shields the bypass line from static switch failure, using special components that act like gates that stop unwanted voltages from causing harm or damaging equipment. If the UPS detects a back feed issue, it sends a signal to a protective device to cut off power, ensuring enhanced protection and added safety for both the users and the equipment.



Emergency Power Off

Keor MP's Emergency Power Off feature enhances safety and protection by providing a quick and reliable method to immediately shut down power in emergency situations, enhancing the safety & protection of the UPS and the load.



FUTURE RESILIENT
RELIABILITY

Unity Power Factor

Keor MP, with its unparalleled operating temperature without deration, delivers unity power factor even at 40 degrees Celsius, making it a dependable choice for continuous operations under the most demanding conditions.

Conformal Coated PCB

Enhances durability with a 75 µm coating, protecting critical components from environmental stressors.

Proactive Maintenance

Continuous monitoring of fans, capacitors, dust filters, and batteries enables timely maintenance and prevents operational disruptions.

FUTURE ADAPTABLE FLEXIBILITY

Dual Input

The dual input feature in Keor MP enhances its adaptability by enabling it to accept power from and switch seamlessly between two independent power sources. This flexibility not only maximizes uptime and operational continuity, but also allows the UPS to adapt to varying electrical conditions and infrastructure configurations making it a versatile choice for critical applications where consistent power availability is paramount.

Flexible DC Bus

The flexible DC bus with 3-stage charging (Nominal, Intermittent & Boost) in Keor MP optimizes battery performance by accommodating various DC input battery voltages and battery configurations and employing an efficient charging process. Its cold start feature adds flexibility by enabling the UPS to initiate and operate using battery power alone, ensuring continuous operation even in the absence of mains power.

High Input Voltage & Frequency Range

Keor MP operates effectively within a wide input voltage window of 310 – 480 V, and a frequency of 40 – 70 Hz, adding to its flexibility by adapting to various power conditions and sources without switching to battery power, thereby extending battery life.

Common Battery Bank

Keor MP features a common battery bank that can be shared between two units, optimizing resource utilization, and providing enhanced flexibility in configuring reliable power backup solutions tailored to diverse operational requirements.

Isolation Transformer

The Keor MP also offers an optional isolation transformer that safeguards critical equipment from low quality upstream power and enables its safe operation.

INNOVATION THAT DRIVES THE FUTURE ACROSS DIVERSE SECTORS

Our customers across these industries have achieved transformative results with the Keor MP—increased efficiency, reduced operational costs, enhanced reliability, and uninterrupted uptime. Explore how Keor MP can drive success in your organization.

IT & ITeS

Reliable power for enterprise offices, co-working spaces and data centers, ensuring uninterrupted operations.

Healthcare

Essential support for hospitals, pathology labs, diagnostic centers and polyclinics, maintaining critical medical services.

Commercial

Power solutions for malls and hospitality sectors, ensuring seamless customer experiences.

Infrastructure

Dependable UPS for ports and private airports, supporting essential operations.

Manufacturing

Uninterrupted power management for industrial applications like process and light industry, optimizing production efficiency.

Keor MP 60 kVA - 200 kVA

Three-Phase UPS

Characteristics

GENERAL SPECIFICATIONS	LGR 311235	LGR 311237	LGR 311239	LGR 311240	LGR 311241	LGR 311242
Nominal Power [kVA]	60	80	100	120	160	200
Active power (kW)	60	80	100	120	160	200
Possible Classification	True Online Double Conversion, VFI - SS - 111					
Possible configuration	3 phase + N + PE					
Specifications	Module-based Monolithic UPS with fault tolerance					
INPUT SPECIFICATIONS						
Input voltage	380-400-415 VAC					
Input voltage range	310~480 VAC at full load					
Input frequency	50 / 60 Hz (40 to 70 Hz)					
Input phases	3 phase + N + PE					
Input THDi (at rated linear load)	< 3%					
Input power factor	0.99					
OUTPUT SPECIFICATIONS						
Nominal Output voltage	380/400/415 VAC					
Output Voltage Regulation	±1 (Balanced Load)					
Output Power Factor	1					
Output frequency	50/60 Hz					
Crest Factor	3:1					
Output Voltage THD	<2% for Linear Load & < 4% for Non Linear load					
Efficiency at rated load	Up to 96%					
Efficiency on Eco mode	Up to 99%					
Permitted overload on mains (PF=1)*	≤110% @ 30 mins, ≤125% @ 10min, ≤150% @ 1min					≤110% @30min ≤125% @1min
Bypass	Inbuilt Static & Maintenance Bypass					
COMMUNICATION AND MANAGEMENT						
Cabinet displays	7" Touch screen color display cabinet and Multicolor status indicator (green/yellow/red)					
Communication ports	MODBUS RS485/Rs 232/USB/Ethernet/SNMP, & Dry Contacts (optional)					
Cold start	Yes					
Maximum number of parallel chassis	Max 6 cabinets					
EPO	Yes					
Alarm & Signals	Configurable acoustic alarms and signals					
Temperature Sensor	Yes, optional					
Safety and Protection	Overload, Short circuit, Back feed port available (external connectional optional) all MCCBs, Over & Low voltage, Fast acting fuses					
BATTERIES						
Battery type/range voltage	VRLA, Ni Cd & Li-ion					
Nominal Battery Voltage	432 VDC~600 VDC					
Charging mode	3 stage advanced cycle					
MECHANICAL CHARACTERISTICS						
Overall Net weight (Kgs)	110	140	160	170	205	220
Frame Dimensions (W X D X H) in mm	250 x 850 x 1000	442 x 850 x 1200				
Ingress Protection	IP20					
Color Shade	RAL 9005+9003					
Cable entry	60-160 kVA rear bottom entry, 200 kVA front & rear bottom entry					
AMBIENT CONDITIONS						
Operating Temperature	0 - 40 °C					
Operating Humidity	20% - 95% non-condensing					
Operating Altitude	Upto 1000 mean sea level w/o deration					
Storage Temperature	20 - 55 °C					
Maximum noise audible at 1m [dBA]	58	60	62	62	63	66
CONFORMITY						
Safety	IEC 62040-1					
EMC	IEC 62040-2					
Performance	IEC 62040-3					
Environmental	IEC 62040-4					
Declarations	RoHS / REACH					

* at 30 Deg C

CUSTOMER SERVICES

Reliable

Directly present in 250+ locations across India to ensure quick support, a team of 900 factory qualified engineers are available 24/7/365 to support your UPS system to ensure availability to the most critical loads.

Excellent

Numeric's competitive edge lies in its ability to provide high value added UPS systems and service for customers. For Numeric, creating value means providing solutions with low energy consumption. The Legrand Group also provides all products required for electrical and digital building installations, particularly as an integrated system, with a solution to fit customer needs.

Tailor-made

We offer a complete range of specific solutions and services to meet customer requirements:
- Technical pre-sales support
- UPS sizing and solution
- Supervision of installation, testing and commissioning.
- Operator training
- Site audits
- Warranty extension offers
- Annual maintenance contract

FUTURE-READY
SUPPORT AND SERVICES

In today's dynamic business environment, pre-emptive and efficient service delivery is key to business continuity. With a customer centric focus, we have put technology as an enabler for a seamless experience, quick response time and faster resolution with CRM.

On-site Training

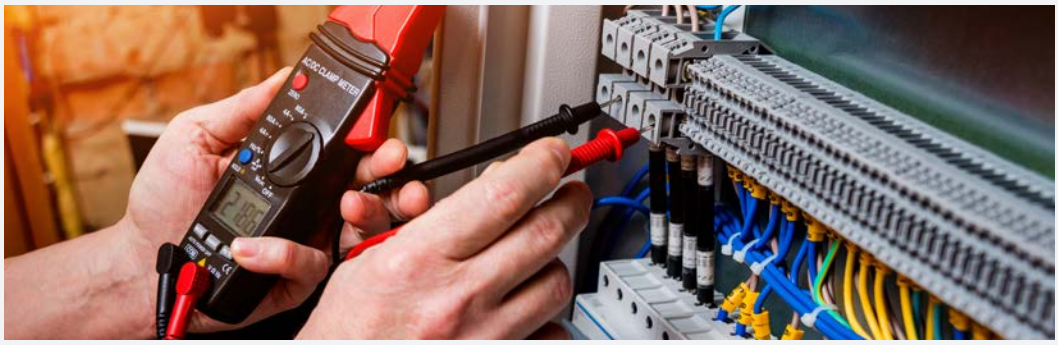
Numeric's service engineers are aptly qualified ot conduct training programmes and sessions which include hands-on operations, safety, erection, decoding the information on the front panel, precautions, necessary monitoring and many more crucial aspects.

Site Test, Commissioning

Our service engineers conduct rigorous site tests and full setting-up of the UPS system before going live. They also configure the UPS according to your requirements. Commissioning operations for all UPS are carried out by qualified engineers ot guarantee seamless start-up. After the final handing over of the UPS system, the installation report is delivered to you.

Maintenance Preventive

Electronic equipment and power systems, such as UPS, contain limited-life components and parts that must be replaced according to the manufacturer's specifications. To ensure optimal performance and to protect your critical application from potential downtime, it is crucial to perform preventive maintenance operations on a regular basis and replace parts when needed. Our service contracts with PM include cleaning, UPS measurements, functional tests, technical reports fi required, battery health check-up and software upgrades. A preventive maintenance plan is one of the most cost-effective actions that can preserve your initial investment and ensure your business continuity.



On Demand Service

In the event of an emergency call, engineers and stocks of spare parts are strategically located at locations near you to minimize downtime. This is available 24x7x365. Our proprietary diagnostic software helps our engineers identify the fault for a short Mean Time To Repair (MTTR). Corrective actions such as part replacement and other fixes are undertaken to return the UPS system back to normal operations.

Customer Excellence Center

Numeric is equipped with a state-of-the-art Customer Excellence Center that provides a comprehensive, technology-enabled, end-to-end customer support available round-the-clock, 24x7.

Battery Health Monitoring System & Remote Monitoring System

Our Battery Health Monitoring System & UPS Remote Monitoring system enable us to monitor the health and performance of batteries and the UPS remotely and in real-time.

Virtual Remote Assistant (VRA)

With our one of a kind Virtual Remote Assistant solution, customers are assured of quick and hassle-free resolution to their issues, which is done over a video call in real time. This innovative approach allows our experts to diagnose and resolve problems efficiently, providing immediate support and minimizing downtime.

SCAN TO FIND OUR
NEAREST BRANCH

NUMERIC®

A Group brand | legrand®

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JUL/24/V1/NDM/MKT/CAT/3PH10