

# Keor HPE



**THREE-PHASE**  
**UPS**  
from 60 to 200 kW

GLOBAL SPECIALIST IN ELECTRICAL AND DIGITAL  
BUILDING INFRASTRUCTURES

 **legrand**

# Legrand UPS

SUPERIOR PERFORMANCE

**SERVICE CONTINUITY**

AND **ENERGY EFFICIENCY**

Legrand, world leader in the manufacture of electrical equipment, offers an extensive range of solutions to meet all the needs of service sector installations, from structured cabling systems for data networks through to control and management of the installation, including trunking and distribution systems.

Incorporating an environmentally-friendly approach to technological development and to address a constantly changing market, Legrand is now offering its new range of UPS and additional functions to ensure maximum continuity of service for all installations.

# Keor HPE

THE **UPS** WITH POWER  
UP TO **200kVA**



# Keor HPE

## THREE-PHASE UPS HIGH EFFICIENCY AND LOW TCO

Keor HPE is designed to reduce TCO. High efficiency double conversion and advanced energy saving modes ensure low operating costs.

Transformer-free architecture and internal battery layout cut commissioning costs and footprint. The technology conversion control dramatically reduces maintenance costs, extending all critical components and battery's life.



## Power factor 1

Thanks to their unity power factor the new TRIMOD HE UPS guarantee maximum real power; 11% more than competitor products offering 0,9 power factor, fully 25% more than those of 0.8 power factor.

## Smart parallel up to 1,2MW

Smart-parallel control continuously monitors load power requirements and maximizes system efficiency, by turning off all unnecessary units.

## Backfeed protection

Plus series comes with backfeed energy detection circuit, for total upstream protection and operator safety.

## Internal battery for 60 and 80

60 and 80 kW models can contain up to 180 batteries, allowing to obtain backup time up to 13 minutes.

## Compact size and one cabinet for 60 to 160 kW configurations



# Keor HPE

## FRONT-ACCESS INSTALLATION AND MAINTENANCE

The UPS Keor HPE is designed to be installed and maintained completely from the front.

All circuit breakers and communications ports are on UPS front side.

A practical interior door allows you to reach even the parts installed on the bottom of the UPS, in order to have maximum access to all components.



## Communications port

The communications ports are put in the internal door, and are available all the most common protocols: relay contact, ModBus-RTU by RS485, ModBus TCP/IP o SNMP by Ethernet.

## Internal front acces

All parts are accessible from the front, to speed up installation and maintenance.



## Cooling system

The optimised cooling system, placed in the upper part of the UPS, enables to position the UPS against the wall without affecting performance.



# Keor HPE

## OPTIMIZED BATTERY MANAGEMENT

Protecting capital expenditure on batteries, whilst ensuring full availability of mission critical applications can only be achieved by keeping them in perfect condition. Keor HPE comes with advanced charging and battery managing features, providing best battery performance and extended lifetime





## Intermittent charging

with adjustable charging cycle (27-3 typical), to extend battery operating life and to achieve maximum energy savings

## Automatic setting of battery charging current

with feeding priority to output loads, ensuring low charging times for long autonomy applications

## Battery charging voltage temperature compensation

to prevent excess battery charging and overheating.  
Temperature sensor included in all units.

## Automatic and manual battery test

to detect any battery performance deterioration

## Easy access to the batteries

Access to the battery is on the side, the drawers can be extracted and inclined to facilitate the connection and substitution.



# Keor HPE

INNOVATIVE OPERATING MODE



Set the best mode of operation for any application according to mains quality, load immunity grade to mains disturbances and system features, to always deliver the best reliable quality power at the highest efficiency.

## On-line double conversion:

VFI (Voltage Frequency Independent) double conversion total protection with up to 96% efficiency thanks to our Green Conversion patented technology.

## ECO mode

suitable for stable mains, in VFD (Voltage Frequency Dependent) mode of operation, achieving 98% efficiency.

## Ultra High Efficiency

the most innovative power protection technology for high immunity grade applications, up to 99,0% efficiency, with the lowest TCO

# Keor HPE 60-80-100-125-160-200

Conventional UPS - Three-phase On-line double conversion VFI

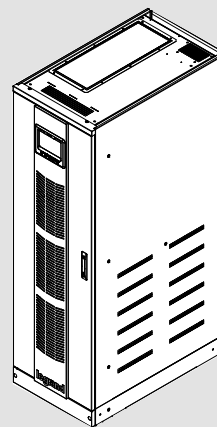


Pack	Model	UPS (with internal installable batteries)				
		Nominal power kVA	Active power kW	Backup time min.	Dimensions H x W x D (mm)	Net weight (kg)
1	KEOR HPE 60	60	60	up to 12	1800 x 560 x 940	250
1	KEOR HPE 80	80	80	up to 11		300

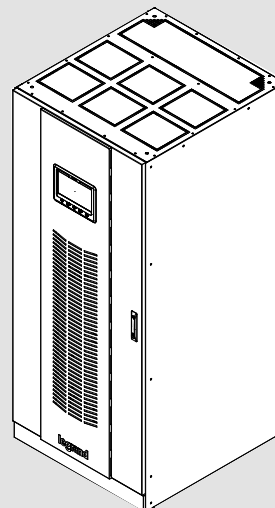
		UPS (without battery)				
		Nominal power kVA	Active power kW	Backup time min.	Dimensions H x W x D (mm)	Net weight (kg)
1	KEOR HPE 60	60	60	-	1800 x 560 x 940	250
1	KEOR HPE 80	80	80	-		300
1	KEOR HPE 100	100	100	-		320
1	KEOR HPE 125	125	125	-	1800 x 560 x 940	360
1	KEOR HPE 160	160	160	-		380
1	KEOR HPE 200	200	200	-	1975x 850 x 900	650

		Options
		Description
1		Serial interface RS-485 ModBus
1		SNMP card
1		Parallel card interface KIT
1		Load-sync card interface kit
1		Isolation transformer
1		Wall mounted fused switch box

Keor HPE 60-80-100-125-160



Keor HPE 200



Keor HPE cabinet batterie

NOTE: The stated back-up times in minutes are estimated and may vary according to the load characteristics, operating conditions and environment.

# Keor HPE 60-80-100-125-160-200

## Conventional UPS - Three-phase On-line double conversion VFI

### Characteristics

General characteristics	60	80	100	125	160	200
Nominal power (kVA)	60	80	100	125	160	200
Active power (kW)	60	80	100	125	160	200
Technology	On-line double conversion VFI-SS-111					
Waveform	Sinusoidal					
Architecture	Conventional UPS, parallelable up to 6 unit					
<b>Input characteristics</b>						
Input voltage	380-400-415 V 3Ph+N					
Input frequency	50-60 Hz (45÷65Hz)					
Input voltage range	400 V -20% / + 15%					
THD of input current	< 3%					
Compatibility with diesel generators	Configurable for synchronism between the input and output frequencies, even for the highest frequency variations					
Input power factor	> 0,99					
<b>Output characteristics</b>						
Output voltage	380, 400, 415 V 3Ph+N selected					
Efficiency	up to 96%					
Output frequency (nominal)	50 /60 Hz					
Crest factor	3:1					
THD of output voltage	<5% (with non-linear load)					
Output voltage tolerance	± 1% (with balance load)					
Overload capacity	10 minutes at 125%, 30 seconds at 150%, 0,1 seconds >150%					
Efficiency in Eco mode	99%					
Bypass	Built-in Automatic and Maintenance By-pass					
<b>Batteries</b>						
Backup time with internal battery	12	11	-	-	-	-
Backup time extension	Scalable with additional battery cabinets					
Battery type	VRLA - AGM Maintenance-free Lead Acid Batteries					
Battery test	Automatic or manual					
Battery Recharge Profile	IU (DIN41773)					
<b>Communication and management</b>						
LCD Display	Four LED's to show status at a glance. Four menu-driven interface buttons. Four status at a glance LEDs					
Communication Ports	voltage free relay contacts, RS485 ModBus-RTU, Ethernet ModBus over IP or SNMP protocol (slot SNMP optional)					
Audible Alarm	Acoustic alarms and warnings, configurable delays					
Emergency Power Off (EPO)	Yes					
Remote Management	Available					
Battery temperature probe	yes					
<b>Physical characteristics</b>						
Dimensions H x W x D (mm)	1800 x 560 x 940					1975 x 850 x 900
Net Weight (kg)	250	300	320	360	380	650
Dimensions battery cabinet H x W x D (mm)	1800 x 503 x 945 (60 batteries)					
<b>Ambient conditions</b>						
Operating temperature (°C)	0÷40					
Relative humidity (%)	< 95% not condensing					
Protection index	IP20					
Noise at 1 m (dBA)	< 60					
<b>Certifications</b>						
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3					



# CUSTOMER SERVICES

## Reliable

Directly present in more than 70 countries and servicing its products in more than 150 countries worldwide, a team of qualified engineers is available 24/7/365 to support your UPS system to ensure power quality and availability to the most critical loads.

## Excellent

Legrand's competitive edge lies in its ability to provide high value-added UPS systems and services for both end users and business partners.

For Legrand, creating value means coming up with solutions for lower energy consumption, but also integrating product design into the overall development process. With around 200 000 catalogue items, the Group also provides all products required for electrical and digital building installations, particularly as integrated systems, finding solutions to fit everyone's needs.

## Tailor-made

Legrand offers a complete range of specific solutions and services to meet customer requirements:

- Technical pre-sales support at the project design stage
- Factory acceptance test
- Supervision of installation, testing and commissioning, site acceptance test
- Operator training
- Site audit
- Warranty extension
- Annual maintenance contract
- Fast intervention on emergency call

## SUPPORT



### **SITE INSPECTION, INSTALLATION SUPERVISION.**

We perform a comprehensive check of the UPS environment to ensure safety and fault-free operation.

Our technical experts give manufacturer's recommendations to the site engineer or electrical contractors, and supervise the UPS installation before load power-up.

### **SITE TEST, COMMISSIONING.**

Our Service Engineers conduct rigorous site tests and full setting-up of the UPS system before going live. They also perform site acceptance tests according to your requirements. Commissioning operations for all UPS are carried out by qualified engineers to guarantee seamless start-up.

After the final handing over of the UPS system, a Test and Commissioning report is delivered to you.

## TRAINING



We offer on-site training to ensure your equipment's safe and efficient operation.

Troubleshooting courses are also available in our plants for intensive hands-on practice on UPS training equipment.

## MAINTENANCE



### **PREVENTIVE MAINTENANCE**

Electronic equipment and power systems, such as UPS, contain life-limited 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 include cleaning, IR thermography, measurements, functional tests, event log and power quality analysis, battery health check, hardware and software upgrades, and technical reports. A Preventive Maintenance Plan is one of the most cost-effective actions that can preserve your initial investment and ensure your business continuity.

### **CORRECTIVE MAINTENANCE, EMERGENCY CALL**

In the event of an Emergency Call, our worldwide service network, with engineers and spare-parts stocks strategically located as close as possible to your site, guarantees a fast intervention time with 24/7/365 assistance.

After connecting his laptop to your UPS, very powerful diagnostic software helps our engineer to identify the fault, thus ensuring short MTTR (Mean Time To Repair).

Corrective actions are performed such as part replacement, adjustments and upgrades to return the UPS system back to normal operation.



**World Headquarters and  
International Department**

87045 Limoges Cedex - France

: + 33 (0) 5 55 06 87 87

Fax : + 33 (0) 5 55 06 74 55

---

In accordance with its policy  
of continuous improvement, the  
Company reserves the right to change  
specifications and designs without notice.  
All illustrations, descriptions, dimensions  
and weights in this catalogue are for  
guidance and cannot be held binding on  
the Company.