

### KEOR HPE UPS









### 3 PHASE UPS from 60 to 500 kVA

legrand

IEW ENERGY O POWER

## **POWER PARTNER**

IN BUSINESS Over three decades of leadership CONTINUITY

Among top 3 UPS companies in India Active installation base of 1 million+ UPS systems\* Largest pan-India service network 5 world-class manufacturing units

### WHO WE ARE

We are the trusted, reliable power partner for mission critical applications across segments like IT, Healthcare, Banking, Telecom, Industries, Government, Retail, Research and Education to name a few. We help businesses optimize their productivity by providing seamless and clean power solutions with controlled environmental footprints. We provide complete peace of mind with five world-class manufacturing units and the largest pan-India sales and service network.

Being part of the Legrand Group since 2012, has given us the advantage of a truly GLOCAL company - global technological expertise and strong local market insights. We are the single largest source for a wide range of power conditioning solutions built with the latest technology, one that is being constantly upgraded with technological advances to meet current market needs. Keeping our UPS' humming and your mission critical applications running is the largest and widest pan-India service network of 250+ direct service centres, five manufacturing units in Chennai and Sinnar that have been certified for meeting ISO 9001: 2015, ISO 14001:2015 and SA 8000:2008 OHSAS 18001:2007 standards and over 900 factory trained service professionals on the field.

\*over one decade.





### KEOR HPE TO UP TO 500 kW



## **KEOR HPE**

### **3 PHASE UPS** HIGH EFFICIENCY AND LOW TCO

KEOR HPE is designed to reduce TCO. High efficiency double conversion, Transformer-free architecture and Internal battery option reduces commissioning costs and footprint. The technology conversion control reduces maintenance costs dramatically, extending the life of all critical components and battery.





### **Power factor 1**

Thanks to unity power factor design. The new KEOR HPE UPS guarantee maximum real power; 11% more than competitor products offering 0.9 power factor, full 25% more than those of 0.8 power factor.

### Input phase auto correction

UPS rectifier is designed to operate in mains even during the mains input phase reversal, avoid discharge of batteries, which increases life cycle of the batteries.

### **Backfeed protection**

Backfeed energy detection circuit, as option for total upstream protection and operator safety.

### **Internal battery**

60 and 80 kW models can allow to obtain backup time up to 12 minutes.

### COMPACT SIZE AND ONE CABINET FOR 60 TO 160 kW CONFIGURATIONS



## **KEOR HPE**

### FRONT-ACCESS INSTALLATION AND MAINTENANCE

The KEOR HPE UPS is designed to be installed and maintained completely from the front. All circuit breakers and communication 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.





### **Communication ports**

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

### Internal front access

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, 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 to extend battery operating life and to achieve maximum energy savings.

### Easy access to the optional internal batteries

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

### Automatic setting of battery charging current with DCM function

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 is included in all units.

### Automatic and manual battery test

To detect any battery performance deterioration.



## KEOR HP

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 with IGBT based rectifier and inverter.

### On-line double | VF conversion | up

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

### Smart ECO mode

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

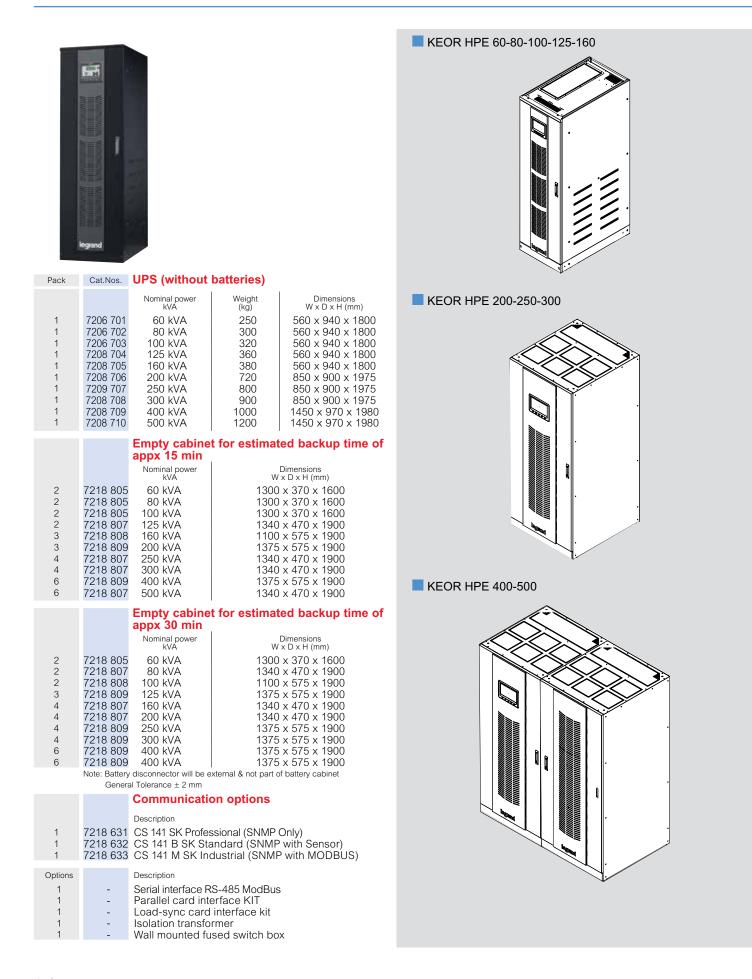
**Cold Start** | Designed to start the UPS on battery mode when mains not available as an optional feature

### Common battery bank

Common battery bank is available as an optional feature when 2 UPS has to be connected in parallel

### KEOR HPE 60-80-100-125-160-200-250-300-400-500

Conventional UPS - 3 Phase On-line double conversion VFI



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Conventional UPS - 3 Phase On-line double conversion VFI

### Characteristics

General characteristics	60	80	100	125	160	200	250	300	400	500
Nominal power (kVA)	60	80	100	125	160	200	250	300	400	500
Active power (kW)	60	80	100	125	160	200	250	300	400	500
Technology	On-line double conversion VFI-SS-111									
Waveform	Sinusoidal									
Architecture	Conventional UPS, parallelable up to 6 units									
nput characteristics										
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%									
Input power factor	> 0.99									
Dutput characteristics										
Output voltage	380, 400, 415 V 3Ph+N selected									
Efficiency	up to 96% up to 97%									97%
Output frequency (nominal)	50 /60 Hz									
Crest factor	3:1									
THD of output voltage	<1% (with linear load), <5% (with non-linear load)									
Output voltage tolerance	$\pm$ 1% (with balance load)									
Overload capacity	125% - 10 min, 150% - 30 sec 110% - 10min, 125% - 5min, 150% - 30 sec									
Efficiency in Eco mode	98%									
Bypass	Built-in Automatic and Maintenance By-pass									
Batteries										
Battery type	VRLA - AGM Maintenance-free Lead Acid Batteries									
Battery test	Automatic or manual									
Communication and managen	nent									
LCD Display	Four LED's to show status at a glance. Four menu-driven interface buttons Touch Screen display									
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				
Physical characteristics										
Dimensions W x D x H (mm)	560 x 940 x 1800 850 x 950 x 1980						1450 x 97	0 x 1980		
Net Weight (kg)	250	300	320	360	380	720	850	900	1000	1200
Ambient conditions				• •						
Operating temperature (°C)	0÷40 °C									
Relative humidity (%)	< 95% not condensing									
Protection index		IP20								
Noise at 1 m (dB)	< 60 < 65 < 72								2	
Certifications								1		
Complies to				EN 6	2040-1, EN	62040-2,	EN 62040-	3		
Reference product standards	UE									

Note: As standard specifications are subject to change due to continuous development. Please check for confirmation in the publication General Tolerance for dimension ± 2 mm

# 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 competitive edge lies in its ability to provide high valueadded 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 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





Today a business is in always ON mode with zero-tolerance for downtime. Numeric offers a wide range of products that promise seamless quality power solutions for all kinds of consumers – industrial, commercial and residential. The range of power solutions covers 3P, 2P and LI across power needs.



### Support

### SITE INSPECTION, INSTALLATION SUPERVISION.

Numeric UPS' safe and fault-free operations start at the time of installation. A team of technical experts from Numeric visit the UPS site to perform a comprehensive check of the environment. The site engineer or electrical contractor is informed of their recommendations. The installation is supervised by the Numeric technical team.

#### SITE TEST, COMMISSIONING.

After the installations, the UPS is subjected to rigorous site tests. The UPS is configured according to user's requirements and completely set-up before going live. After successful testing, the UPS is handed over with the installation report.





### TRAINING

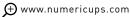
On-site training is made available to ensure the safe and efficient operation of the equipment. Hands-on training for the client's engineers and technical team can be arranged at Numeric's plants



### Maintenance

### PREVENTIVE MAINTENANCE

Optimal performance of the UPS require regular preventive maintenance operations, with parts replaced when needed. Numeric offers Service Contracts with Preventive Maintenance that include cleaning, UPS measurements, functional tests, technical reports (optional), battery health check up and software upgrades. **CORRECTIVE MAINTENANCE, EMERGENCY CALL** Engineers and spare parts stocks have been strategically located to handle emergencies. A powerful diagnostic software helps engineers identify the fault quickly and ensure short MTTR (Mean Time To Repair). The diagnosis further helps corrective actions such as part replacement, adjustments to be performed and return the UPS system back to normal.



#### Head Office

10th Floor, Prestige Center Court, Office Block, Vijaya Forum Mall, 183, N.S.K Salai, Vadapalani, Chennai - 600 026. Phone: +91 44 4656 5555

#### **Regional Offices**

#### New Delhi

A 25, 1st Floor, Mohan Co-Operative Industrial Estate, Mathura Road, New Delhi - 110 044. Phone : +91 11 26990028 / 29 / 30

#### Kolkata

Bhakta Tower, Plot No. KB22, 2nd & 3rd Floor, Salt Lake City, Sector - III, Kolkata - 700 098. Phone : +91 33 4021 3535 / 3536

#### Mumbai

C/203, Corporate Avenue, Atul Projects, Near Mirador Hotel, Chakala, Andheri Ghatkopar Link Road, Andheri (East), Mumbai - 400 099. Phone : +91 22 3385 6201

#### Chennai

10th Floor, Prestige Center Court, Office Block, Vijaya Forum Mall, 183, N.S.K Salai, Vadapalani, Chennai - 600 026. Phone : +91 44 3024 7236 / 200

#### **Branch Offices**

#### Chandigarh

SCO 4, First Floor, Sector 16, Panchkula, Chandigarh - 134 109. Phone : +91 93160 06215

#### Dehradun

First Floor, Plot No. 1 & 2, (679/1) Vijay Park Colony, Main Chakrata Rd, Dehradun -248 001. Phone : +91 135 272 9649

#### Jaipur

Plot No. J-6, Scheme-12B, Sharma Colony, Bais Godown, Jaipur - 302 019. Phone : +91 141 221 9082

#### Lucknow

209/B, 2nd Floor, Cyber Heights, Vibhuti Khand, Gomti Nagar, Lucknow - 226 018. Phone : +91 93352 01364

#### Bhubaneswar

N-2/72 Ground Floor, IRC Village, Nayapally, Bhubaneswar - 751 015. Phone: +91 674 255 0760

### Guwahati

House No 02, Rajgarh Girls High School Road (Behind Rajgarh Girls High School), Guwahati - 781 007. Phone : +91 361 245 0322/245 1987

#### Patna

204, Fraser Road, Hemplaza, 2nd Floor, Patna - 800 001. Phone : +91 612 220 0657

#### Ranchi

202 & 203, Bardwan Compound, Lalpur, 2nd Floor, Ranchi - 834 001. Phone : +91 651 221 4071

#### Ahmedabad

A-101/102, Mondeal Heights, Beside Hotel Novotel, Near Iscon Circle, S G Highway, Ahmedabad - 380 015. Phone : +91 79 6134 0555

#### Bhopal

Plot No. 160, Devashish Complex, 2nd Floor, Zone-I, MP Nagar, Bhopal - 462 011. Phone : +91 755 276 4202

#### Nagpur

Plot No.173, Ground Floor, Utkarsh Ashwini Appts, RPTS Road, Laxmi Nagar, Nagpur - 440 022. Phone : +91 712 228 6991 / 228 9668

#### Pune

302, 3rd Floor, Swastik Chambers, Above ICICI Bank, Off Karve Road, Erandwane, Pune - 411 004. Phone : +91 84 5201 4036

#### Bengaluru

No-58, First Floor, Firoze White Manor, Bowring Hospital Road, Shivajinagar, Bangalore -560 001. Phone : +91 80 6822 0000

#### Coimbatore

No. B-15, Thirumalai Towers, No. 723, 4th Floor, Avinashi Road, Coimbatore - 641 018. Phone : +91 422 420 4018

#### Hyderabad

No. 205-208, 2nd Floor, Block 2, White House Kundan Bag, Begumpet, Hyderabad - 500 016. Phone : +91 40 4567 1732

#### Kochi

Door No. 50/1107A9, JB Manjooran Estate, 3rd Floor, Bypass Junction, Edappally, Kochi – 682 024. Phone : +91 484 2801 921

#### Madurai

Door. No.1, Pillayar Koil Street, S.S.Colony, Madurai - 625 016. Phone : +91 452 260 4555



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