

KEOR T

3 PHASE
UPS
from 10 to 120 kVA



NUMERIC
A Group brand | **legrand**

KEOR T

3 PHASE UPS

KEOR T has been designed with advanced technologies and the latest generation components; IGBT based rectifier and IGBT based inverter with multi DSP controller realized to satisfy both users and installers for operational needs and performance. This UPS aims to be functional, safe and very easy to install and use.

Legrand has studied the best way to reconcile high-tech performance and ease of use, making user friendly technologically advanced products. KEOR T supplies the maximum protection and power quality for any type of IT loads, light industrial, heavy industrial.

10-15-20-30 kVA



40-60-80-100 kVA



120 kVA



Easy Installation

- Easy installation guaranteed by front access to all wiring connections.
- Availability of standard configuration with isolation transformer or with optional batteries inside the UPS.
- Designed to easily connect an additional battery cabinet to obtain long back-up time.
- Standard internal backfeed protection which provides easy installation without additional cost in UPS supply switchboard.



0,32 m²
(30 kVA)



0,54 m²
(60 kVA)

Regenerative Load Handling Capability

KEOR T UPS are designed to handle the regenerative power in mains mode by allowing the power to flow back to the utility, without causing any damage to the UPS and regenerative loads connected to it.

KEOR T provides reliable power continuity for regenerative load characteristics. For Example loads like, passenger lift, CNC machines, motor, etc...with regeneration during braking.



Dual input

KEOR T UPS can be powered from two separate AC supply sources: the dual input configuration can be selected at installation by simply removing a linking connector from its input terminal.



KEOR T

EASY MANAGEMENT



User friendly touch screen control panel

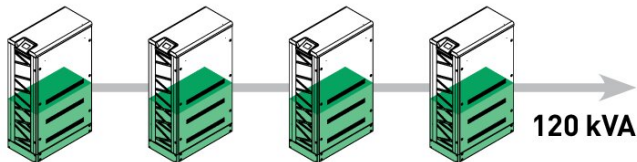
KEOR T is equipped with a touch screen graphic display that provides information, measurements, status and alarms of the UPS in different languages; the intuitive graphical icons allow you to browse through the various screens easily and quickly. In just a few steps you have access to all the operating parameters of the system.

You can also configure and set the parameters to adapt the UPS to various operating modes in order to optimize your energy efficiency.

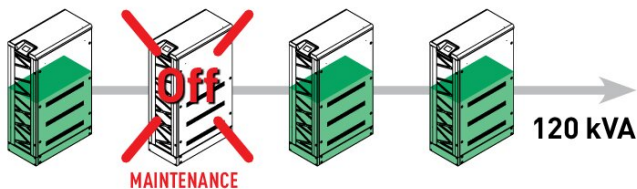
Scalable to increase the service continuity

The parallel connections between the UPS's allow different levels of redundancy hence the maximum continuity of service.

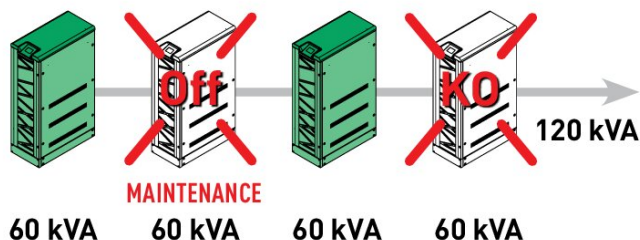
STANDARD WORKING CONDITION



AUTOMATIC LOAD RE-BALANCE IN MAINTENANCE CASE



MAXIMUM AUTOMATIC LOAD BALANCE IN CASE OF FAILURE DURING MAINTENANCE



Reduction of Total Cost Ownership (TCO)

Thanks to its design features and the high level of efficiency (up to 96% thanks to 3 level inverter design), there is a drastic reduction of TCO, even from the installation phase; the key factors that allow you to gain these advantages are:

- Transformerless Design
- Significant reduction in power loss due to 3 level inverter design
- Reduced dimensions and power use for air conditioning
- Output voltage harmonics - low total harmonic distortion (THDV)



Parallelable to increase the power

Depending on the power demand, it is possible to connect in parallel operation up to 8 units of the same power rating. This allows delivery of total power up to 960 kVA.



KEOR T

EXCLUSIVE CHARACTERISTICS

Multicolor LED Bar

The LED bar is highly visible even from a distance, allowing instant visual communication of the UPS status.

This allows significant time savings in the event of a failure or diagnosis and considerably reassures the user.





Small Foot Print with isolation transformer (as option)

It is possible to mount an isolation transformer inside the KEOR T UPS cabinet, upon request, thereby resulting in reduced floor space and simplified installation.



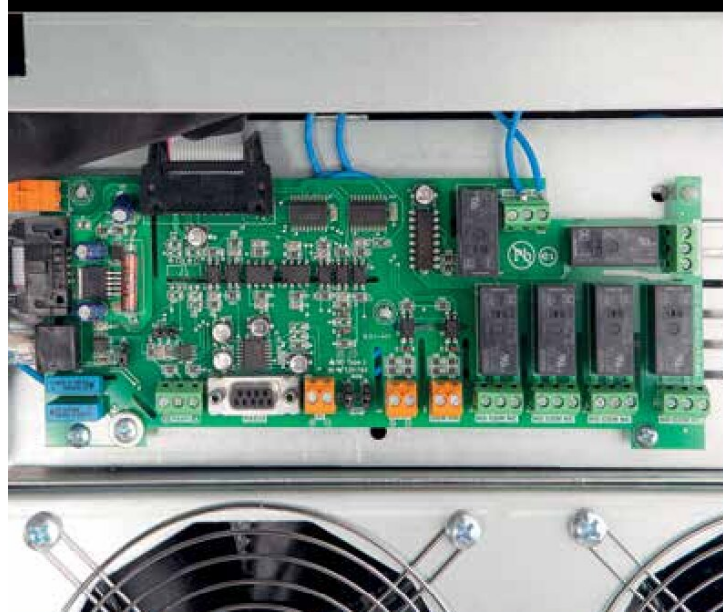
Internal battery up to 60 kVA (as option)

With battery pack installed inside the UPS cabinet, NO additional battery cabinets are needed, hence a smaller footprint.

Safe and fast battery installation

The Battery drawers system allows:

- safe physical transport of battery and fast mounting on site
- safe and easy connection of individual battery strings outside of the cabinet
- lower UPS downtime for battery replacement.



Communication features

- Standard RS232
- ModBus
- Programmable dry contacts
- EPO & GenSet and Remote Monitoring Panel
- USB Converter (optional)
- Internal SNMP solutions (optional)



KEOR T

Conventional UPS - 3 Phase On-line double conversion VFI



KEORT10-30

KEORT40-60-80-100

KEORT120

Pack	Cat. Nos.	UPS without isolation transformer		
		Nominal power (in kVA)	Backup time (in min)	Weight (in kg)
1	7206 401	10 kVA	0 min	118
1	7206 403	15 kVA	0 min	132
1	7206 405	20 kVA	0 min	134
1	7206 407	30 kVA	0 min	140
1	7206 409	40 kVA	0 min	255
1	7206 411	60 kVA	0 min	277
1	7206 413	80 kVA	-	315
1	7206 414	100 kVA	-	350
1	7206 415	120 kVA	-	430

Pack	Cat. Nos.	UPS with isolation transformer		
		Nominal power (in kVA)	Backup time (in min)	Weight (in kg)
1	7206 402	10 kVA	-	208
1	7206 404	15 kVA	-	222
1	7206 406	20 kVA	-	254
1	7206 408	30 kVA	-	270
1	7206 410	40 kVA	-	435
1	7206 412	60 kVA	-	507

Pack	Cat. Nos.	Accessories		
1	7218 631	CS 141 SK Professional (SNMP only)		
1	7218 632	CS 141 B SK Standard (SNMP with Sensors)		
1	7218 633	CS 141 M SK Industrial (SNMP with Modbus)		

Pack	Cat. Nos.	Empty cabinet for estimated backup time of appx. 15 mins	
		Nominal power (in kVA)	Dimension (W x D x H) in mm
2	7218 801	10 kVA	400 x 400 x 1300
2	7218 801	15 kVA	400 x 400 x 1300
2	7218 801	20 kVA	400 x 400 x 1300
2	7218 802	30 kVA	770 x 400 x 1300
2	7218 803	40 kVA	770 x 450 x 1300
2	7218 803	60 kVA	770 x 450 x 1300
2	7218 804	80 kVA	770 x 750 x 1300
2	7218 804	100 kVA	770 x 750 x 1300
2	7218 805	120 kVA	800 x 920 x 1500

Pack	Cat. Nos.	Empty cabinet for estimated backup time of appx. 30 mins	
		Nominal power (in kVA)	Dimension (W x D x H) in mm
2	7218 801	10 kVA	400 x 400 x 1300
2	7218 801	15 kVA	400 x 400 x 1300
2	7218 802	20 kVA	770 x 400 x 1300
2	7218 803	30 kVA	770 x 450 x 1300
2	7218 804	40 kVA	770 x 750 x 1300
2	7218 804	60 kVA	770 x 750 x 1300
2	7218 805	80 kVA	800 x 920 x 1500
2	7218 805	100 kVA	800 x 920 x 1500
3	7218 806	120 kVA	1025 x 575 x 1900

Note: Dimension will have a variation of ± 2 mm

KEOR T

Conventional UPS - 3 Phase On-line double conversion VFI

Characteristics

General characteristics	KEOR T10	KEOR T15	KEOR T20	KEOR T30	KEOR T40	KEOR T60	KEOR T80	KEOR T100	KEOR T120
Nominal power (kVA)	10	15	20	30	40	60	80	100	120
Active power (kW)	9	13,5	18	27	36	54	72	90	108
Technology	On-line double conversion VFI-SS-111								
Waveform	Sinusoidal								
Architecture	Stand Alone or Distributed Parallel up to 8 units								
Input characteristics									
Input voltage	380, 400, 415 V 3Ph+N+PE								
Input frequency	45-65 Hz								
Input voltage range (Ph-Ph)	half load 208-467 / full load 312-467V								
THD of input current	< 3% at full load*								
Compatibility with diesel generators	Configurable for synchronization between the input and output frequencies, even for high frequency variations								
Input power factor	> 0,99								
Output characteristics									
Output voltage	380, 400, 415 V 3Ph+N (Adjustable from Front Panel)								
Efficiency	up to 96%								
Efficiency in Eco mode	up to 98,5%								
Output frequency (nominal)	50 /60 Hz ±0,01% free run (Adjustable from Front Panel)								
Crest factor	3:1								
THD of output voltage	< 2% (at full linear load)								
Output power factor	0,9								
Output voltage tolerance	± 1%								
Bypass	Built-in Automatic and Maintenance By-pass								
Isolation Transformer	Transformerless Design. Optional Internal Isolation Transformer on request								
Batteries									
Backup time extension	Scalable with additional battery cabinets								
Battery type	VRLA - AGM Maintenance-free								
Battery Test	Automatic or manual								
Communication and management									
LCD Display	Touch screen, led bar status, live synoptic view for real time								
Communication Ports	RS232, GenSet, Programmable 4 Relay Contacts, ModBus								
Back Feed Protection	Internal Back Feed Protection Device is Standard								
Audible Alarm	Acoustic alarms and warnings								
Net Interface Slot	optional SNMP card								
Emergency Power Off (EPO)	Yes								
Remote Management	Available								
Physical characteristics									
Dimensions H x W x D (mm)	1345 x 400 x 800				1650 x 600 x 900		1650 x 600 x 800		1650 x 793 x 800
Ambient conditions									
Operating temperature (°C)	0÷40								
Relative humidity (%)	20÷95% not condensing								
Protection index	IP20								
Noise at 1 m (dBA)	< 55								
Compliance									
Reference product standards	CE								
Complies to	EN/IEC 62040-3								

* 40-60 kVA

Note: As standard specification and design changes from time to time, please ask for confirmation given in this publication.



32 YEARS

of experience in UPS industry

AMONG TOP 3

UPS companies in India.

INSTALLATION BASE OF >1MN

UPS systems*

258 SERVICE OFFICES & 44 SALES OFFICES

Pan India

7 WORLD CLASS

manufacturing units

*over one decade.

POWER PARTNER IN BUSINESS CONTINUITY

With an experience of over **32 years** in the UPS industry, Numeric has envisioned and relentlessly strived to offer reliable power quality solutions to its customers. With solutions from supporting a desktop PC to a large MW range mission critical power requirement, Numeric is amongst the top 3 UPS companies in India. We have been serving thousands of satisfied customers across various market segments in India. Our customers include leading organizations from various market segments, such as IT, Healthcare, Banking, Education & Research, Telecom, Industries, Government, etc. Our installation base, over the last decade, is more than 1 million active UPS's across market segments.

With 7 world class manufacturing units located in Chennai, Puducherry and Sinnar, we are poised to meet the diverse needs of our customers. We provide 24/7 customer support

through a wide and robust service and support system, which provide power continuity uptime and productivity of our customer's businesses. Our network of 258 service centers and 44 sales offices is the largest service support network in India. More than 900 factory-trained service professionals are stationed in those locations to maintain UPS uptime.

Numeric has been a part of the Legrand group since the year 2012.

Legrand, a global specialist in Electrical and Digital building infrastructure is a 5B€ organization operating across 180 countries.

Numeric today provides complete solutions in UPS across Line Interactive, 1 Phase, 3 Phase and Modular UPS's. Global expertise and local knowledge make us a truly GLOCAL company.

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 configure the UPS 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, installation 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 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 with PM include cleaning, UPS, measurements, functional tests, technical reports if required, battery health check, 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 engineers and spare-parts stocks strategically located as close as possible to your location, provide an intervention time with 24/7/365 assistance. After connecting a laptop to your UPS, a 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 to return the UPS system back to normal operation.