

UPS UNINTERRUPTIBLE POWER SUPPLY

THE **UPS** RANGE
UP TO **800kVA**



THE **GLOBAL SPECIALIST**
IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURE



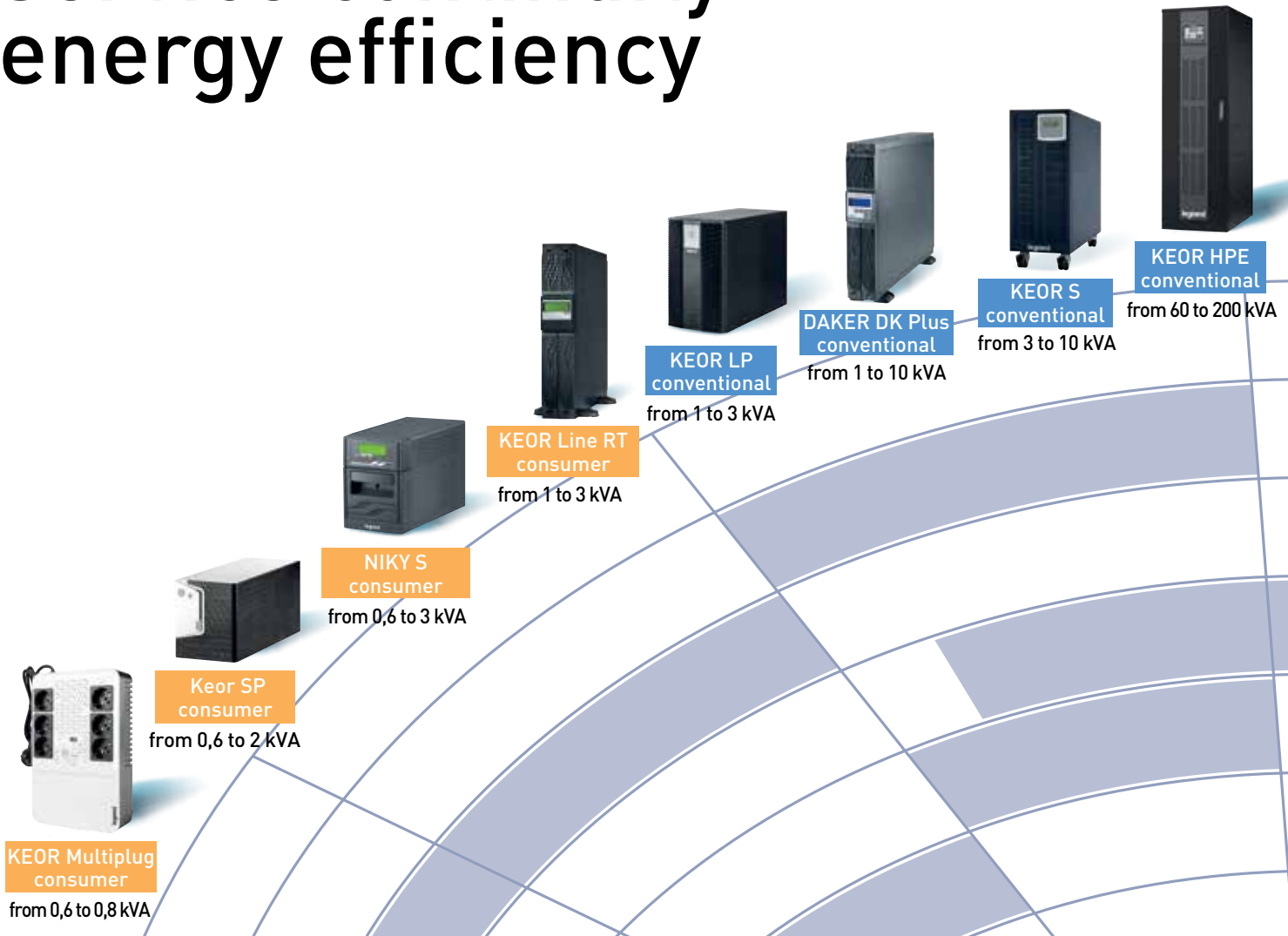
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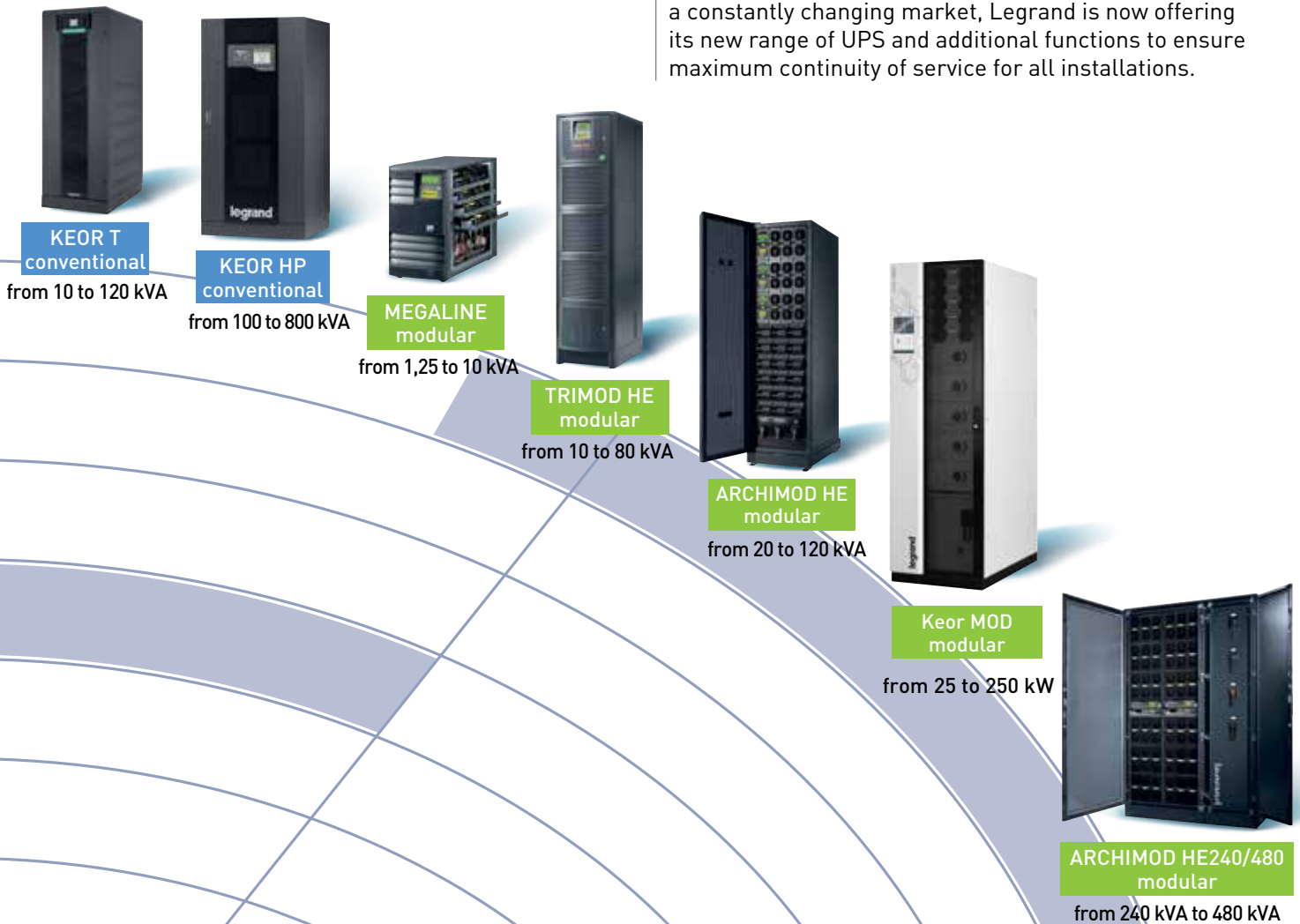
UPS

superior performance
service continuity
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.





High efficiency

The innovative design and high quality of the components used enable our UPS to achieve up to 96% efficiency, leading to significant energy savings.

Advanced technology

The On-line Double Conversion technology ensures provision of a top quality power supply and maximum energy efficiency

Environmentally responsible approach

Our UPS are built with the greatest care with a view to sustainable development. Moreover, Legrand has developed an innovative testing system which reduces the energy consumed for each device manufactured.

BRING YOUR POWER EFFICIENCY beyond the limit



Reliable electronics

The optimum sizing of the power stages and thorough testing of each unit ensure excellent reliability.

Latest generation components

A careful search for the best electronic components on the market, together with the most up-to-date manufacturing methods, ensure that Legrand UPS use leading-edge technology and provide optimum reliability.

High performance batteries

The batteries used in Legrand UPS are the best on the market. The innovative charging system significantly extends battery life by up to 50%.

SIMPLE
RELIABLE

LOW COST

APPLICATION FIELDS



Shops



Small office



Home Entertainment systems

CONSUMER AND SOHO UPS

up to 3 kVA



Keor Multiplug
Single-phase
600 and 800VA



Keor Sp
Single-phase
line interactive UPS VI,
from 600 up to 2000VA



NIKY-S
Single-phase
line interactive UPS VI-SS,
from 1 up to 3kVA



KEOR Line RT
Single-phase
line-interactive UPS,
from 1 up to 3kVA

CHARACTERISTICS OF THE RANGE

Compact, easy to install and configure.

With an electronic voltage regulator, an LED indicator and telephone protection, they provide total, reliable protection of the installation.

They provide an excellent quality/price ratio and guarantee of a lasting investment.

Keor Multiplug

Single phase VI



3 100 83

Automatic start-up: when there is no mains supply or it is of poor quality, the UPS continues working using a battery and switches off if the network breaking time exceeds the Backup time.

Technical characteristics

- Replaceable fuse for fine protection in case of short-circuits
- LED indicators
- Internal AVR (Automatic Voltage Regulator)
- USB Charger
- Available outputs sockets in German or French type

Cat. No.		Multi-socket UPS				
		4 backup sockets with protection from voltage surges 2 sockets with protection from voltage surges				
French standard	German standard	Nominal power (VA)	Active power (W)	Backup time (min)	No. of sockets	
3 100 83	3 100 81	600	360	up to 15	4+2	
3 100 84	3 100 82	800	480	up to 15	4+2	

Keor Multiplug

Single phase VI

Characteristics

General characteristics	3 100 83 3 100 81	3 100 84 3 100 82
Nominal power (VA)	600	800
Active power (W)	360	480
Technology	Line Interactive VI	
Waveform	Simulated SineWave	
Input characteristics		
Input voltage	230 V	
Input frequency	50-60 Hz +/- 5Hz	
Input voltage range	170 V-290 V	
Output characteristics		
Output voltage	230 V ± 10%	
Output frequency (nominal)	50/60 Hz +/-1 Hz	
USB charger/Voltage	Type A female/5 V	
Mechanical characteristics		
Dimensions W x H x D (mm)	190 x 89.5 x 296	
Net weight (kg)	5	5,5
Ambient conditions		
Ambient operating temperature (°C)	0 to 40°C	
Relative humidity (%)	< 95% non-condensing	
Noise at 1 m (dBA)	< 40	
Certifications		
Reference product standards	EN 62040-1, EN 62040-2	

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

Keor SP

Single phase VI



3 101 83

3 101 92

Technical characteristics

- 3 colors LED bar
- Mute button
- Internal AVR (Automatic Voltage Regulator)
- USB Port
- Available outputs sockets in IEC, German or French type

Cat. Nos. UPS international socket

Cat. Nos.	Nominal power VA	Active power W	Backup time (min)	No. of sockets IEC	Communication ports
3 101 80	600	360	up to 15	4	USB HID
3 101 83	800	480	up to 15	4	USB HID
3 101 86	1000	600	up to 10	6	USB HID
3 101 89	1500	900	up to 10	6	USB HID
3 101 92	2000	1200	up to 10	6	USB HID

UPS with IEC+ German socket

Cat. Nos.	Nominal power VA	Active power W	Backup time (min)	No. of sockets IEC+GER	Communication ports
3 101 81	600	360	up to 15	1+1	USB HID
3 101 84	800	480	up to 15	1+1	USB HID
3 101 87	1000	600	up to 10	2+2	USB HID
3 101 90	1500	900	up to 10	2+2	USB HID
3 101 93	2000	1200	up to 10	2+2	USB HID

UPS with IEC+ French socket

Cat. Nos.	Nominal power VA	Active power W	Backup time (min)	No. of sockets IEC+FR	Communication ports
3 101 82	600	360	up to 15	1+1	USB HID
3 101 85	800	480	up to 15	1+1	USB HID
3 101 88	1000	600	up to 10	2+2	USB HID
3 101 91	1500	900	up to 10	2+2	USB HID
3 101 94	2000	1200	up to 10	2+2	USB HID

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

Keor SP

Single phase VI

Characteristics

General characteristics	3 101 80	3 101 83	3 101 86	3 101 89	3 101 92
Nominal power (VA)	600	800	1000	1500	2000
Active power (W)	360	480	600	900	1200
Technology	Line Interactive VI				
Waveform	Simulated SineWave				

Input characteristics

Input voltage	230 V ± 10%
Input frequency	50-60 Hz +/- 5Hz
Input voltage range	170 V-290 V

Output characteristics

Output voltage	230 V ± 10%
Output frequency (nominal)	50/60 Hz +/-1Hz
USB charger/Voltage	- Type A female / 5 V

Communication and management

Screen and signalling	Two buttons and LED bar for real-time control of the status of the UPS
Remote control	Available

Mechanical characteristics

Dimensions W x H x D (mm)	120 x 138 x 330	148 x 173 x 380			
Net weight (kg)	5	5,5	9	10,5	11,8

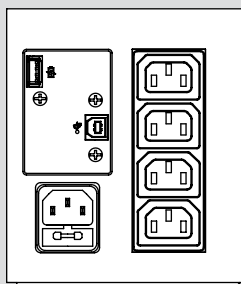
Ambient conditions

Ambient operating temperature (°C)	0 to 40°C
Relative humidity (%)	< 95% non-condensing
Noise at 1 m (dBA)	< 40

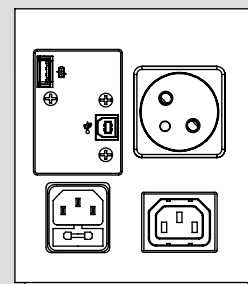
Certifications

Reference product standards	EN 62040-1, EN 62040-2
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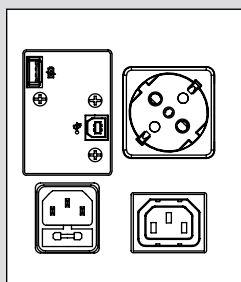
IEC Socket



French socket



German Socket



NOTE: The pictures refer to Keor SP 800 model

NIKY S

Single phase VI-SS



3 100 06

Technical characteristics

- Sinusoidal output
- Microprocessor control
- MODEM/LAN telephone protection
- RS232 or USB interface
- Cold start function
- Protection against voltage peaks
- Integrated self-diagnostics
- Intelligent battery management
- Overload and short-circuit protection
- Excellent voltage regulation

Cat. Nos. UPS with IEC socket

Cat. Nos.	Nominal power VA	Active power W	Backup time (min)	No. of sockets IEC	Communication ports
3 100 06	1000	600	5	6	USB-RS232
3 100 20	1500	900	5	6	USB-RS232
3 100 07	2000	1200	5	6	USB-RS232
3 100 08	3000	1800	5	6	USB-RS232

NIKY S

Single phase VI-SS

Characteristics

General characteristics	3 100 06	3 100 20	3 100 07	3 100 08
Nominal power (VA)	1000	1500	2000	3000
Active power (W)	600	900	1200	1800
Technology	Line interactive VI-SS			
Waveform	Sinusoidal			

Input characteristics

Input voltage	230 V ± 10%
Input frequency	50-60 Hz +/- 3Hz
Input voltage range	160 V-290 V

Output characteristics

Output voltage	230 V ± 10%
Output frequency (nominal)	50/60 Hz +/- 0.2%
THD of output voltage	< 3% with linear load

Communication and management

Screen and signalling	LCD Display with three buttons and three LEDs for real-time control of the status of the UPS
Telephone protection	RJ 11/RJ 45
Remote control	Available

Mechanical characteristics

Dimensions H x W x D (mm)	247x173x369	247x173x465		
Net weight (kg)	13	15	22	24

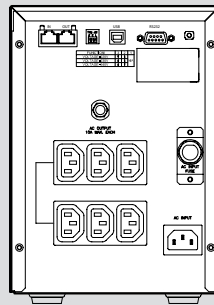
Ambient conditions

Ambient operating temperature (°C)	0 to 40°C
Relative humidity (%)	0 to 95% non-condensing
Noise at 1 m (dBA)	< 40

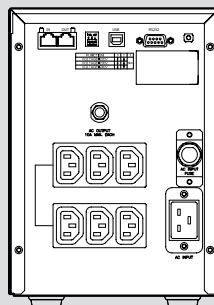
Certifications

Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3
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1000-1500-2000 VA



3000 VA



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

KEOR LINE RT

Line Interactive UPS - Single phase VI-SS



3 100 45

Cat. Nos. UPS with IEC socket

Cat. Nos.	Nominal power VA	Active power W	Backup time (min)	No. of sockets IEC (10A/16A)	Communication ports
3 100 45	1000	900	10	8 / -	USB-RS232
3 100 46	1500	1350	8	8 / -	USB-RS232
3 100 47	2200	1980	8	8 / 1	USB-RS232
3 100 48	3000	2700	8	8 / 1	USB-RS232

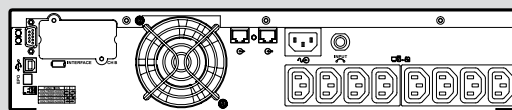
Cat. Nos. Accessories

Cat. Nos.	Description
3 109 69	Volt-free contact card
3 109 52	Rack support bracket kit

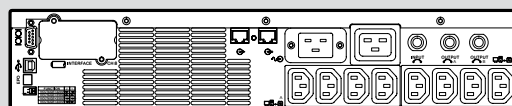
Characteristics

General characteristics	3 100 45	3 100 46	3 100 47	3 100 48
Nominal power (VA)	1000	1500	2200	3000
Active power (W)	900	1350	1980	2700
Technology	Line interactive VI-SS			
Waveform	Sinusoidal			
Input characteristics				
Input voltage	230 V ± 10 %			
Input frequency	45-65 Hz			
Input voltage range	165 V-300 V			
Output characteristics				
Output voltage	230 V ± 10 %			
Output frequency (nominal)	50/60 Hz +/-0,5 % autosensing			
THD of output voltage	< 3 % with linear load			
Communication and management				
Screen and signalling	Three buttons, display and three LEDs for real-time control of the status of the UPS			
Telephone protection	RJ11/RJ45			
Remote control	SNMP Slot			
Mechanical characteristics				
Dimensions W x D x H (mm)	440x405x88		440x650x88	
Net weight (kg)	19	20	34	37
Ambient conditions				
Ambient operating temperature (°C)	0 to 40°C			
Relative humidity (%)	0 ÷ 95 % non-condensing			
Noise at 1 m (dBA)	< 40			
Certifications				
Reference product standards	EN62040-1, EN62040-2, EN62040-3			

1000-1500 VA



2200-3000 VA



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



APPLICATION FIELDS



Hospital and healthcare



Office and working areas



Museum

CONVENTIONAL UPS

from 0,8 up to 800 kVA



Keor LP
Single-phase
UPS from
1 to 3 kVA



DAKER DK Plus
Single-phase
UPS VFI, from
1 to 10 kVA



Keor S
Single-phase
UPS from
3 to 10 kVA



Keor T/Keor T eva
Three-phase
UPS VFI from
10 to 120 kVA



Keor HPE
Three-phase
UPS VFI from
60 kVA to 200 kVA



Keor HP
Three-phase
UPS VFI from
100 to 800 kVA

CHARACTERISTICS OF THE RANGE

On-line double conversion UPS with DSP microprocessors for precise, constant control of all measurements and of the power factor correction circuit (PFC).

Professional solutions with power up to 800 kVA.

Transformer-free technology for high quality energy output with up to 96% efficiency.

DAKER DK Plus

**On-Line double conversion
UPS that can be used in both
tower and rack configurations**

CONVERTIBLE SINGLE PHASE UPS

The main parameters of the system and the status of the UPS, including the battery charge level and faults, are displayed on the LCD screen.

The models from 5 to 10 kVA have power factor 1 with an efficiency of up to 94%.

Additional battery cabinets are available to increase the Backup time of the UPS. A charger can be added in all battery cabinets for fast, safe charging.



**Tower version with additional
battery cabinet**

SAFE

EFFICIENT
INNOVATIVE

Three standard sizes for power up to 10 kVA

The UPS and additional battery cabinets are available in sizes ranging from 2 to 4 units, depending on the required power and Backup time.



UPS and 2-unit battery cabinet



UPS and 3-unit battery cabinet



UPS and 4-unit battery cabinet

Reversible screen

With the reversible screen, the Daker DK Plus UPS can be used in both tower and 19" rack configuration.



Keor S

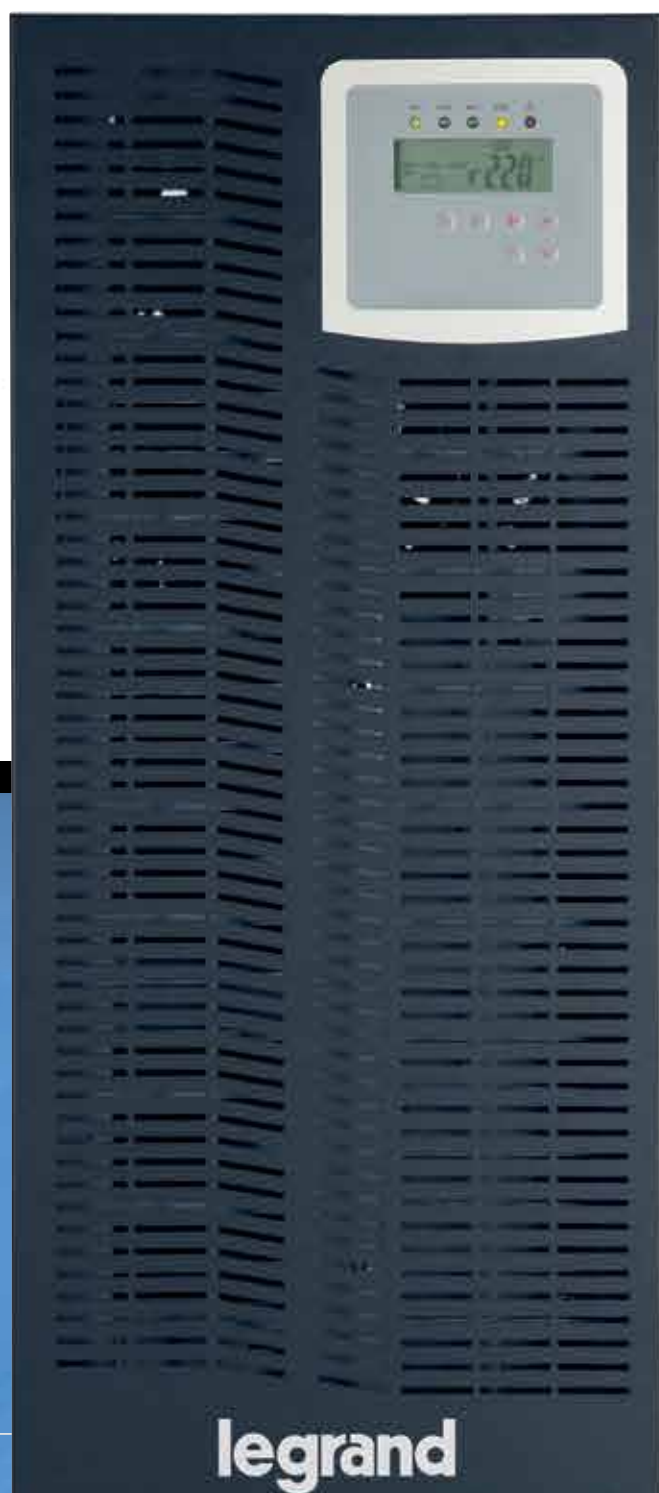
ONLINE SINGLE PHASE

The integrated maintenance bypass simplifies the maintenance operations, increases the service continuity and helps to reduce the complexity of the installations.

Easy access to circuit breakers,
INPUT/OUTPUT terminals,
maintenance bypass and
communication port



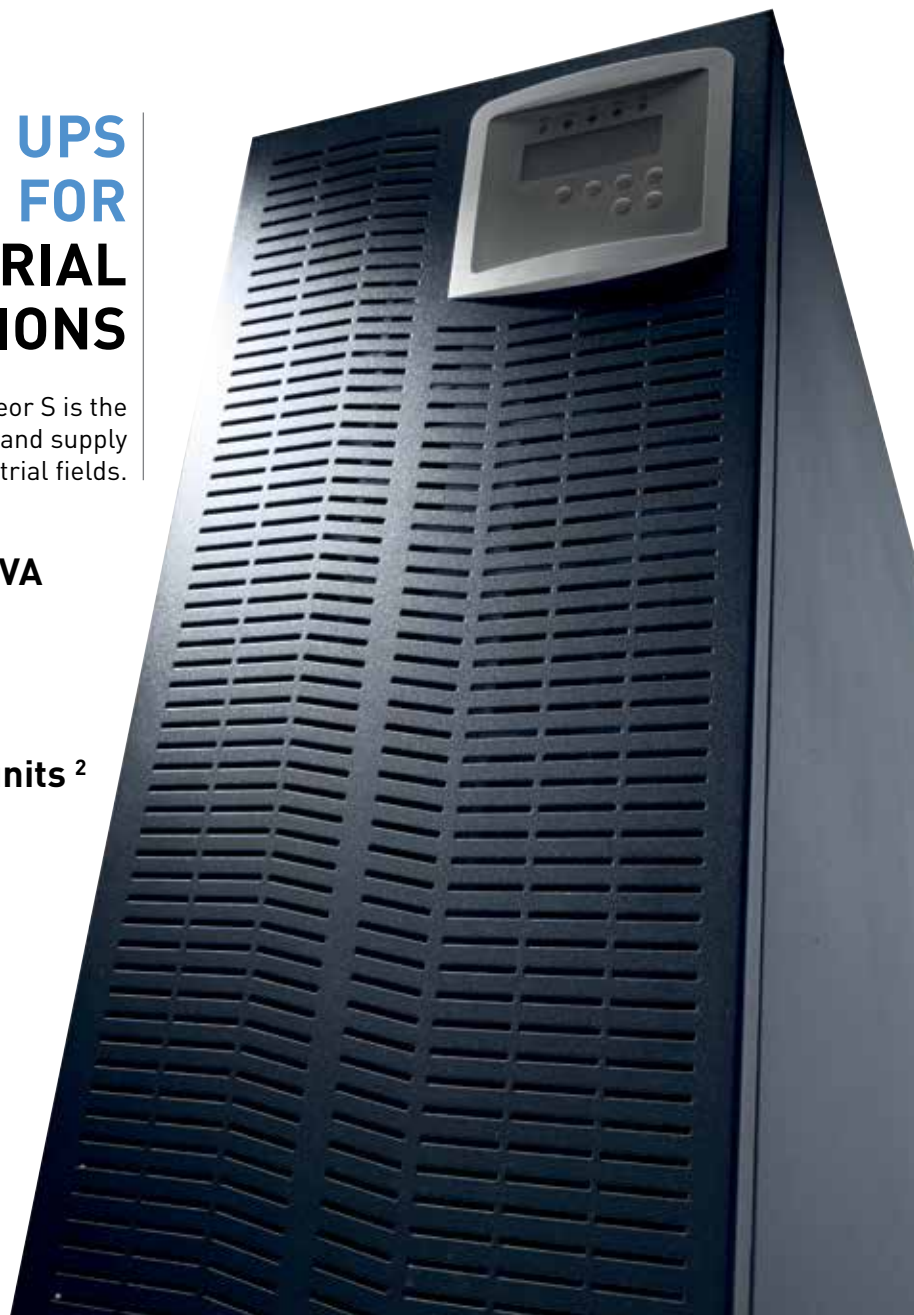
**ON LINE UPS
COMPACT AND
EASY TO MOVE**



legrand

SINGLE PHASE UPS DESIGNED FOR INDUSTRIAL APPLICATIONS

Compact and robust, Keor S is the perfect UPS to protect and supply loads in the industrial fields.



Power Range From 3 KVA up to 10KVA

Power factor 0,9 ¹

High Efficiency up to 94%

Built in paralleling feature up to 4 units ²

Built in Back Feed Protection

Protection Degree IP31

Long Backup time availability

Integrated maintenance bypass ²

Integrated internal isolation transformer option

¹0,8 for 3kVA

²Only available for 6 and 10kVA models



User friendly Display



Remote control & Monitoring Supervision



Easy to move

Keor T

THREE-PHASE UPS

Keor T has been designed with advanced technologies and the latest generation components; realized to satisfy both users and installers for operational needs and performance. These UPS aim 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 maximum protection and power quality for any type of IT load, tertiary application, lighting or building.

10-15-20-30 kVA

40-60-80-100 kVA

120 kVA

10-15-20-30 kVA

EVO 10-15-20 kVA



Easy Installation

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



0,21 m²
(EVO 20 kVA, 7')

0,32 m²
(30 kVA, 20')

0,54 m²
(60 kVA, 14')

Small Foot Print with Internal Batteries

Keor T UPS present the only 60 kVA on the market with internal batteries, this saving the cost of the battery cabinet and valuable floor space, and simplifying installation.

Reduction of Total Cost Ownership (TCO)

Thanks to its design features and the high level of efficiency (up to 96% thanks to 3-Level technology), 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 IGBT topology
- Reduced dimensions and power use for air conditioning
- Low Output Total Harmonic Distortion (THDV)



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.



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.

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 critical load supply.

Keor T EVO

**NEW COMPACT UPS
UP TO 20 kVA**

PF=1 -> VA=W

Keor T EVO is able to provide over 10% more active power than Keor T with same kVA Nominal power

Compact dimensions

Keor T EVO has foot print 35% smaller with the double of the power density compared the Keor T of same nominal power.

Embedded batteries for standard back up time

Keor T EVO can contain from 24 up to 36 batteries.



Complete Distribution Panel with Embedded Manual bypass



Wheels for easy installation and maintenance



Floor fixing kit for secure installations



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 Keor HPE 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.

Backfeed detection

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

Internal battery

60 and 80 kW models can contain up to 180 batteries, allowing to obtain Backup time up to 12 minutes.



**COMPACT SIZE
AND ONE CABINET
FOR 60 TO 160 KW
CONFIGURATIONS**

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 Backup time applications.

Battery charging voltage temperature compensation

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

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.

Automatic and manual battery test

to detect any battery performance deterioration.

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 HP

THE UPS WITH POWER UP TO 800kVA

The Three-Phase UPS range is available in three types of cabinet with total power rating up to 4.8 MVA

Compact size with the best balance between footprint and power

EASY installation and maintenance

High efficiency up to 95%

Integrated transformer for the galvanic separation between AC/DC side

Output power factor 0,9



KEOR HP
100-125-160

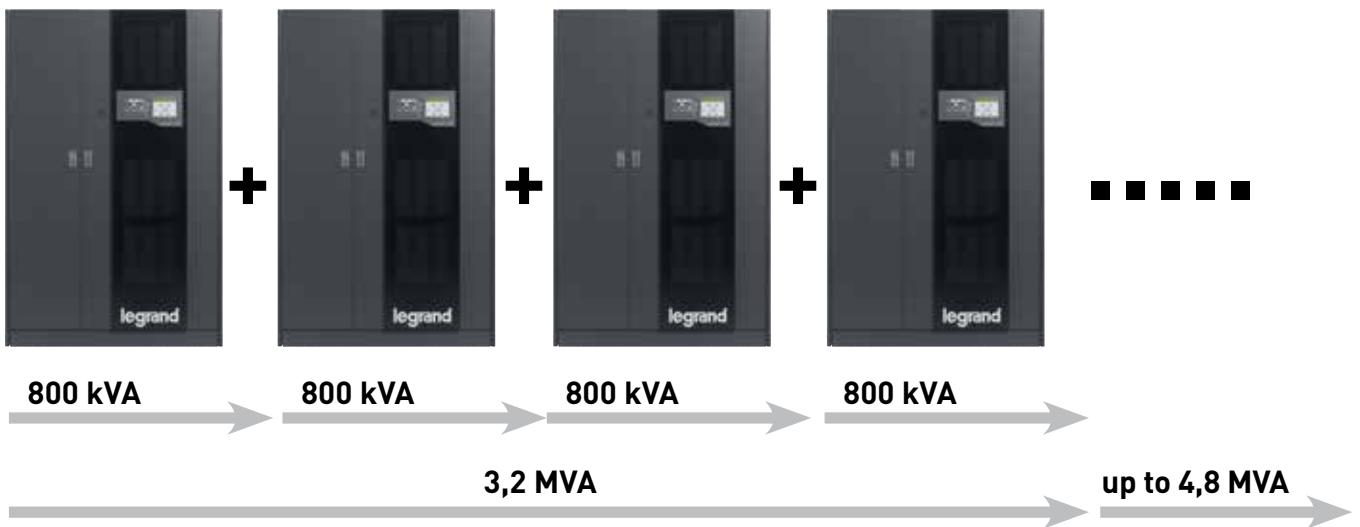
KEOR HP
200-250-300

KEOR HP
400-500-600-800

PARALLELABLE UP 6 UNITS

To increase the power

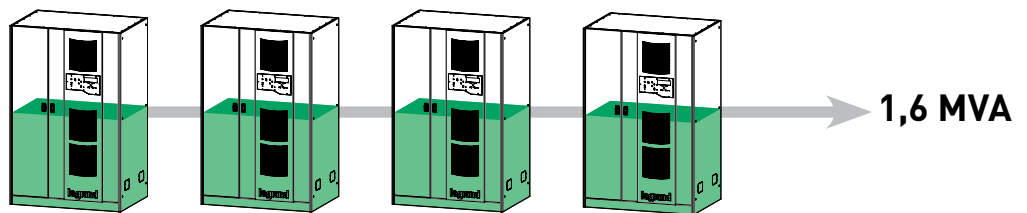
Depending on the power demand, it is possible to connect in parallel operation up to 6 units of the same power rating. This allows delivery of total power up to 4.8 MVA.



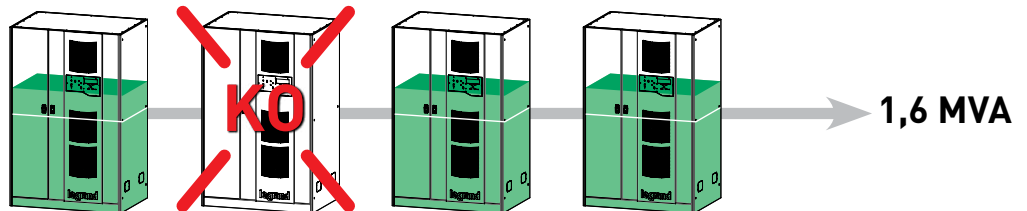
To increase the service continuity

The parallel connections between the UPS enables to realize different levels of redundancy and obtain the maximum continuity of service.

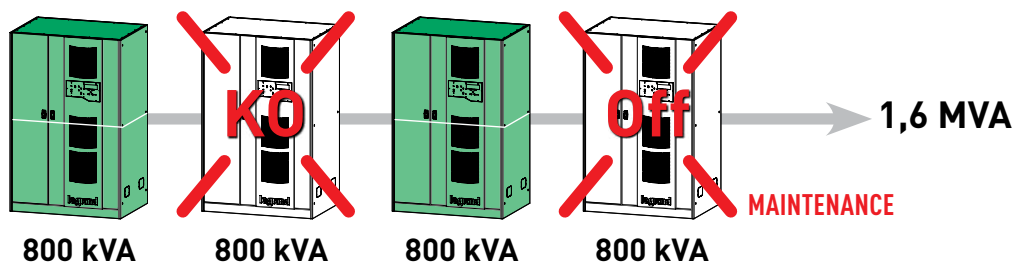
STANDARD WORKING CONDITION



AUTOMATIC LOAD BALANCE IN FAILURE CASE



MAXIMUM AUTOMATIC LOAD BALANCE IN FAILURE AND MAINTENANCE CASE



Keor LP

Conventional UPS - Single phase On-line double conversion VFI



3 101 54

3 101 56

3 101 58

Cat. Nos. UPS with IEC sockets

Cat. Nos.	Nominal power (VA)	Active power (W)	Backup time (min)	No. of sockets IEC 10A	No. of french socket	Weight (kg)
3 101 54	1000	900	5	3	-	10
3 101 56	2000	1800	5	6	-	17
3 101 58	3000	2700	5	6	-	23

UPS with french standard sockets

Cat. Nos.	Nominal power (VA)	Active power (W)	Backup time (min)	No. of sockets IEC 10A	No. of french socket	Weight (kg)
3 101 55	1000	900	5	3	1	10
3 101 57	2000	1800	5	6	2	17
3 101 59	3000	2700	5	6	2	23

Accessories

Description

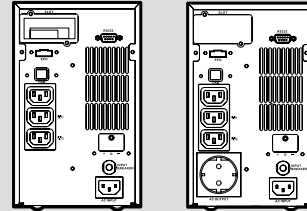
- 3 105 98* Additional battery cabinet for 3 101 54 - 3 101 55
- 3 105 99* Additional battery cabinet for 3 101 56 - 3 101 57
- 3 106 00* Additional battery cabinet for 3 101 58 - 3 101 59
- 3 109 58 Additional battery charger for battery cabinet 3 105 98
- 3 109 60 Additional battery charger for battery cabinet 3 105 99
- 3 109 61 Additional battery charger for battery cabinet 3 106 00
- 3 109 53 Bypass

*Battery included

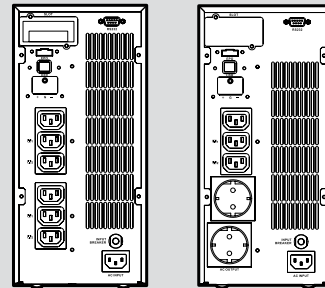
Keor LP

Conventional UPS - Single phase On-line double conversion VFI

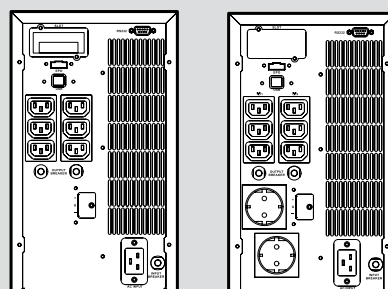
Keor LP 1000



Keor LP 2000



Keor LP 3000



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

Keor LP

Conventional UPS - Single phase On-line double conversion VFI

■ Characteristics			
General characteristics	3 101 54 3 101 55	3 101 56 3 101 57	3 101 58 3 101 59
Nominal power (VA)	1000	2000	3000
Active power (W)	900	1800	2700
Technology	On-line double conversion VFI-SS-111		
Waveform	Sinusoidal		
Architecture	UPS with extendable Backup time		
Input characteristics			
Input voltage	230 V		
Input frequency	45-65 Hz ±2 % Autosensing		
Input voltage range	210 V÷240 Vac at 100% load		
Input power factor	> 0,99		
Output characteristics			
Output voltage	230 V ± 1 %		
Efficiency	Up to 90 %		
Output frequency (nominal)	50/60 Hz synchronised		
Peak factor	3 : 1		
THD of output voltage	< 3% with linear load		
Overload capacity:	<105% ONLINE mode, 121÷150% for 10 sec., 106÷120% for 30 sec., >151% instant transfer to bypass		
Bypass	Automatic, internal, synchronised, electromechanical (for overloads and operating problems)		
Batteries			
Backup time extension	Si		
Backup time (min)	5		
Communication and management			
Screen and signalling	Multi-coloured LED status indicator, alarms and audible signalling		
Communication ports	1 RS232 serial port, 1 slot for network interface connection (ex. CS141)		
Emergency Power Off (EPO)	Yes		
Remote control	Software can be downloaded free of charge		
Mechanical characteristics			
Dimensions (H x W x D) (mm)	236 x 144 x 367	322 x 151 x 444	322 x 189 x 444
Dimensions of battery cabinet (H x W x D) (mm)	322 x 151 x 444	322 x 151 x 444	322 x 151 x 444
Battery cabinet Net weight (kg)	31	31	31
Ambient conditions			
Ambient operating temperature (°C)	0÷40		
Relative humidity (%)	20÷80 non condensing		
Noise at 1 m (dBA)	< 50		
Certifications			
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3		

DAKER DK PLUS

UPS - On-line double conversion VFI



3 101 74



3 101 77



3 106 64

The main parameters of the UPS, including the battery charge level and faults, are displayed on the LCD screen on the front panel. The integrated communication software not only controls the UPS and its switch-off if there is a malfunction, and enables the user to test the main functions remotely, communicate via SNMP/Internet/network adaptor and access the functions of the UPS via the Internet, but can also send the user an SMS if specific events occur. The internal extension connector enables a WEB/SNMP card or a relay interface to be installed which provides insulated contacts for applications on industrial control panels or remote alarm panels. If there is an electronic fault, overload, overheating or for scheduled maintenance operations, the automatic or manual (optional) bypass ensures continuity of the power supply for critical loads. A bypass switch is available for maintenance.

Cat. Nos.	Convertible UPS with batteries			
	Nominal power (VA)	Active power (W)	Backup time (min)	Weight (kg)
3 101 70	1000	900	10	16
3 101 71	2000	1800	10	29,5
3 101 72	3000	2700	8	30
3 101 73	5000	5000	5	60
3 101 74	6000	6000	4	60

Cat. Nos.	Battery cabinet (empty)	
	Description	
3 106 65	Battery cabinet for 3 101 70	
3 106 66	Battery cabinet for 3 101 71	
3 106 67	Battery cabinet for 3 101 72	
3 106 68	Battery cabinet for 3 101 73 - 3 101 74 - 3 101 75 - 3 101 76	
3 106 69	Battery cabinet for 3 101 77 - 3 101 78	

	Convertible UPS without batteries			
	Nominal power (VA)	Active power (W)	Phase configuration	Weight (kg)
3 101 75	5000	5000	-	25
3 101 76	6000	6000	-	25
3 101 77	10000	10000	-	26
3 101 78*	10000	9000	-	28

* 3-1 version

	Battery cabinet (with batteries)	
	Description	
3 106 60	Battery cabinet for 3 101 70	
3 106 61	Battery cabinet for 3 101 71	
3 106 62	Battery cabinet for 3 101 72	
3 106 63	Battery cabinet for 3 101 73 - 3 101 74 - 3 101 75 - 3 101 76	
3 106 64	Battery cabinet for 3 101 77 - 3 101 78	

	Accessories	
	Description	
3 109 52	Rack support bracket kit	
3 109 53	External manual Bypass for 3 101 70 - 3 101 71 - 3 101 72	
3 109 63	External manual Bypass for 3 101 73 - 3 101 74 - 3 101 75 - 3 101 76 - 3 101 77	
3 109 59	Additional charger for 3 101 70	
3 109 61	Additional charger for 3 101 71 - 3 101 72	
3 109 54	Additional charger for 3 101 73 - 3 101 74 - 3 101 75 - 3 101 76 - 3 101 77 - 3 101 78	
3 109 69	Dry contact card	

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

DAKER DK PLUS

UPS - On-line double conversion VFI

Characteristics

General characteristics	3 101 70	3 101 71	3 101 72	3 101 73	3 101 75	3 101 74	3 101 76	3 101 77	3 101 78
Nominal power (VA)	1000	2000	3000	5000		6000		10000	10000
Active power (W)	900	1800	2700	5000		6000		10000	9000
Technology	On-line double conversion VFI-SS-111								
Waveform	Sinusoidal								
Architecture	Convertible tower and 19" rack								
Input characteristics									
Input voltage	230 V								380V 3P+N
Input frequency	50-60 Hz \pm 5% autosensing								
Input voltage range	176V - 280V at full load								305V - 485V
THD of input current	< 3%								
Input power factor	> 0,99								> 0,9
Output characteristics									
Output voltage	230 V \pm 1%								
Output frequency (nominal)	50/60 Hz (configurable via LCD panel) \pm 0.1%								
Efficiency	up to 90%	up to 91%	up to 92%	up to 94%				up to 90%	
Peak factor	1:3								
THD of output voltage	< 3% with linear load								
Output voltage tolerance	\pm 1%								
Internal automatic bypass	included								
External maintenance bypass	optional	optional	optional	optional	optional	optional	optional	optional	-
Batteries									
Backup time extension	Yes								
Backup time (min)	10	10	8	5	-	4	-	-	-
Communication and management									
Screen and signalling	Four buttons and five LEDs for real-time control of the status and the main parameters of the UPS								
Communication ports	RS232 and USB serial ports								RS232 serial ports
Remote control	Available								
Connector for network interface	SNMP								
Back feed protection	yes								
Emergency power off (EPO)	yes								
Mechanical characteristics									
Dimensions (H x W x D) (mm)	440 x 88 (2U) x 405	440 x 88 (2U) x 600		440x196 (4U)x680	440x88 (2U)x680	440x196 (4U)x680	440x88 (2U)x680	440x132 (3U) x680	
Net weight (kg)	16	29,5	30	60	25*	60	25	26	28
Dimensions of battery cabinet H x W x D (mm)	440x196 (4U)x425	440 x 88 (2U) x 600		-	440 x 88 (2U) x 680	-	440 x 88 (2U) x 680	440 x 132 (3U) x 680	
Ambient conditions									
Operating temperature (°C)	0 \div 40°C								
Protection index	IP 21								
Relative humidity (%)	20 to 80%								
Noise at 1 m (dBA)	< 50								
Heat dissipation (BTU/h)	490	654	818	892		1300		1636	
Certifications									
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3								

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

DAKER DK PLUS

Configurations



	1000 VA 2 cabinet L 2U + 4U	2000 VA 2 cabinet L 2U + 2U	3000 VA 3 cabinet L 2U + 2U + 2U	6000 VA 2 cabinet L 2U + 2U	10000 VA 2 cabinet L 3U + 3U
TOWER version					



	1000 VA 2 cabinet H 2U + 4U (294mm)	2000 VA 2 cabinet H 2U + 2U (196mm)	3000 VA 3 cabinet H 2U + 2U + 2U (294mm)	6000 VA 2 cabinet H 2U + 2U (196 mm)	10000 VA 2 cabinet H 3U + 3U (294mm)
RACK version					

DAKER DK PLUS

Long Backup time table

Model	Power	Backup time	Dimensions and number of cabinets H x W x D (mm)	Cat. Nos.
Daker DK Plus	1000 VA	10'	440 x 88 x 405	3 101 70
		1h 22'	440 x 88 x 405 + 440 x 196 x 425	3 101 70 + 3 106 65
		2h 44'	440 x 88 x 405 + 440 x 196 x 425 (x2)	3 101 70 + 3 106 65 (x2)
		4h 22'	440 x 88 x 405 + 440 x 196 x 425 (x3)	3 101 70 + 3 106 65 (x3)
		5h 52'	440 x 88 x 405 + 440 x 196 x 425 (x4)	3 101 70 + 3 106 65 (x4)
	2000 VA	10'	440 x 88 x 600	3 101 71
		39'	440 x 88 x 600 (x2)	3 101 71 + 3 106 66
		1h 22'	440 x 88 x 600 (x3)	3 101 71 + 3 106 66 (x2)
		1h 57'	440 x 88 x 600 (x4)	3 101 71 + 3 106 66 (x3)
		2h 44'	440 x 88 x 600 (x5)	3 101 71 + 3 106 66 (x4)
	3000 VA	8'	440 x 88 x 600	3 101 72
		34'	440 x 88 x 600 (x2)	3 101 72 + 3 106 67
		1h 6'	440 x 88 x 600 (x3)	3 101 72 + 3 106 67 (x2)
		1h 33'	440 x 88 x 600 (x4)	3 101 72 + 3 106 67 (x3)
		2h 3'	440 x 88 x 600 (x5)	3 101 72 + 3 106 67 (x4)
	5000 VA	10'	440 x 88 x 680 + 440 x 88 x 680	3 101 75 + 3 106 68
		29'	440 x 88 x 680 + 440 x 88 x 680 (x2)	3 101 75 + 3 106 68 (x2)
		49'	440 x 88 x 680 + 440 x 88 x 680 (x3)	3 101 75 + 3 106 68 (x3)
		1h 11'	440 x 88 x 680 + 440 x 88 x 680 (x4)	3 101 75 + 3 106 68 (x4)
	6000 VA	10'	440 x 88 x 680 + 440 x 88 x 680	3 101 76 + 3 106 68
29'		440 x 88 x 680 + 440 x 88 x 680 (x2)	3 101 76 + 3 106 68 (x2)	
49'		440 x 88 x 680 + 440 x 88 x 680 (x3)	3 101 76 + 3 106 68 (x3)	
1h 11'		440 x 88 x 680 + 440 x 88 x 680 (x4)	3 101 76 + 3 106 68 (x4)	
10000 VA	7'	440 x 132 x 680 + 440 x 132 x 680	3 101 77 + 3 106 69	
	18'	440 x 132 x 680 + 440 x 132 x 680 (x2)	3 101 77 + 3 106 69 (x2)	
	29'	440 x 132 x 680 + 440 x 132 x 680 (x3)	3 101 77 + 3 106 69 (x3)	
	42'	440 x 132 x 680 + 440 x 132 x 680 (x4)	3 101 77 + 3 106 69 (x4)	
	56'	440 x 132 x 680 + 440 x 132 x 680 (x5)	3 101 77 + 3 106 69 (x5)	
Daker DK Plus 3 - 1	10000 VA	7'	440 x 132 x 680 + 440 x 132 x 680	3 101 78 + 3 106 69
		18'	440 x 132 x 680 + 440 x 132 x 680 (x2)	3 101 78 + 3 106 69 (x2)
		29'	440 x 132 x 680 + 440 x 132 x 680 (x3)	3 101 78 + 3 106 69 (x3)
		42'	440 x 132 x 680 + 440 x 132 x 680 (x4)	3 101 78 + 3 106 69 (x4)
		56'	440 x 132 x 680 + 440 x 132 x 680 (x5)	3 101 78 + 3 106 69 (x5)

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

Keor S

Conventional UPS - Single-phase On-line double conversion



3 101 21

3 107 41

Cat. Nos.	Single-phase UPS			
	Nominal power (VA)	Active power (W)	Backup time (min)	Net weight (kg)
3 101 21	3000	2400	10	53
3 101 22	3000	2400	27	75
3 101 23	3000	2400	50	97
3 101 28	6000	5400	22	106
3 101 31	10000	9000	10	114

Single-phase UPS with isolation transformer				
	Nominal power (VA)	Active power (W)	Backup time (min)	Net weight (kg)
3 101 25	3000	2400	10	85
3 101 29	6000	5400	0	100
3 101 35	10000	9000	0	126

Battery cabinet

Description

- 3 107 40 Empty battery cabinet
- 3 107 41 Battery cabinet (for KEOR S 3000)
- 3 107 42 Battery cabinet (for KEOR S 3000)
- 3 107 43 Battery cabinet (for KEOR S 3000)
- 3 107 44 Battery cabinet (for KEOR S 6000-10000)
- 3 107 45 Battery cabinet (for KEOR S 6000-10000)

Accessories

Description

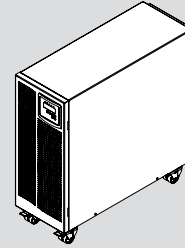
- 3 109 61 Battery charger for additional battery cabinet (for 3 107 41 - 3 107 42 - 3 107 43)
- 3 109 54 Battery charger for additional battery cabinet (for 3 107 44 - 3 107 45)

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

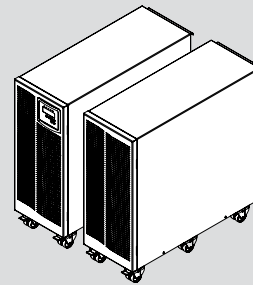
Keor S

Conventional UPS - Single-phase On-line double conversion

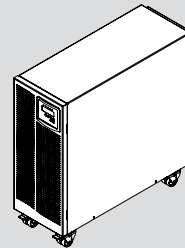
- UPS with internal batteries Backup time up to 50 min for 3 kVA



- UPS for long Backup time with additional battery cabinet



- UPS with isolation transformer built in



- Rear pannel



- Long Backup time table

Power	UPS	Battery cabinet	Backup time (min.)
6000	3 101 28	3 107 44	55
6000	3 101 28	3 107 45	85
10000	3 101 31	3 107 44	27
10000	3 101 31	3 107 45	50
6000	3 101 29	3 107 45	55
6000	3 101 29	3 107 44	22
10000	3 101 35	3 107 44	10
10000	3 101 35	3 107 45	27

Keor S

Conventional UPS - Single-phase On-line double conversion

Characteristics

General characteristics	KEOR S 3kVA	KEOR S 6kVA	KEOR S 10kVA
Nominal power (VA)	3000	6000	10000
Active power (W)	2400	5400	9000
Technology	On-line double conversion		
Waveform	Sinusoidal		
Architecture	conventional UPS		
Input characteristics			
Input voltage	220V-230V-240V		
Input frequency	45-65 Hz		
Input voltage range	160V-288V	195V-280 V	
THD of input current	6%		
Input power factor	> 0,99		
Output characteristics			
Output voltage	220V/230V/240V Adjustable from Front Panel		
Output frequency (nominal)	50 /60 Hz Adjustable from Front Panel +/- 0,05%		
Crest factor	2,5:1		
THD of output voltage	< 1,5% with linear load < 3% with non-linear load		
Overload capacity	10 seconds at 125%-150% 30 seconds at 106%-120%	120 seconds at 100%-120% 30 seconds at 121%-150%	
Efficiency in Eco mode	98%		
Bypass	-	Automatic bypass and manual maintenance bypass	
Batteries			
Backup time extension	Yes		
Communication and management			
LCD Display	Available		
Communication Port	1 RS232 serial ports, 1 USB port, modbus and SNMP optional	1 RS232 serial ports, modbus and SNMP optional	
Remote Management	Available		
Mechanical characteristics			
Dimensions H x W x D (mm)	716 x 275 x 776		
Dimensions battery cabinet H x W x D (mm)	716 x 275 x 776		
Ambient conditions			
Operating temperature (°C)	0÷40		
Relative humidity (%)	20÷80 non condensing		
Protection index	IP31		
Noise at 1 m (dBA)	< 50		
Compliance			
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3		

Keor T EVO

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



KEOR T EVO 10-15-20

Cat. Nos. **UPS**

Cat. Nos.	Nominal power kVA	Backup time (min.)	Dimensions H x W x D (mm)	Net weight (kg)
3 102 70	10	-	1020 x 265 x 800	78
3 102 71	10	10	1020 x 265 x 800	145
3 102 72	10	15	1020 x 265 x 800	168
3 102 73	15	-	1020 x 265 x 800	79
3 102 74	15	7	1020 x 265 x 800	163
3 102 75	15	10	1020 x 265 x 800	180
3 102 76	20	-	1020 x 265 x 800	84
3 102 77	20	7	1020 x 265 x 800	185

Accessories

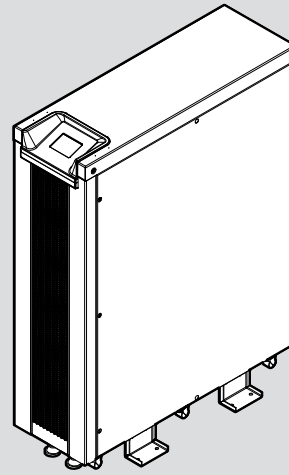
Description

3 109 15 Parallel kit/UPS (PCB + 5 m cable)

Keor T EVO

UPS - trifase on line doppia conversione VFI

Keor T EVO 10-15-20



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

Keor T EVO

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

Characteristics

General characteristics	KEOR T EVO 10	KEOR T EVO 15	KEOR T EVO 20
Nominal power (kVA)	10	15	20
Active power (kW)	10	15	20
Technology	On-line double conversion VFI-SS-111		
Waveform	Sinusoidal		
Architecture	Stand Alone or Distributed Parallel up to 4 units		
Input characteristics			
Input voltage	380, 400, 415 V Ph+N+PE		
Input frequency	45-65 Hz		
Input voltage range (Ph-Ph)	half load 208 -459 / full load 358-459V		
THD of input current	<5% 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 3F+N (Adjustable from Front Panel)		
Efficiency	up to 95%		
Efficiency in Eco mode	up to 98,5%		
Output frequency (nominal)	50 /60 Hz $\pm 0,01\%$ (Adjustable from Front Panel)		
Crest factor	up to 3:1		
THD of output voltage	<2% (at full linear load)		
Output power factor	1		
Output voltage tolerance	$\pm 1\%$		
Overload capability	10 min. 125%, 60 sec. 150%		
Bypass	Built-in Automatic and Maintenance By-pass		
Batteries			
Battery type	VRLA - AGM Maintenance-free		
Internal Battery	Yes		
Battery Test	Automatic or manual		
Battery Recharge Profile	IU (DIN41773)		
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	Embedded		
Audible Alarm	Acoustic alarms and warnings		
Net Interface Slot	yes for optional SNMP card		
Emergency Power Off (EPO)	Yes		
Remote Management	Available		
Physical characteristics			
Dimensions H x W x D (mm)	1020 x 265 x 800		
Net Weight (kg)	78	79	84
Ambient conditions			
Operating temperature (°C)	0÷40		
Relative humidity (%)	20÷95% not condensing		
Protection index	IP20		
Acoustic Noise at 1m; 50%load (dBA)	< 51		
Compliance			
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3		

Keor T

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



KEOR T10-30

KEOR T10-30

KEOR T40-60-80-100

KEOR T120

Cat. Nos.	UPS			
	Nominal power kVA	Backup time (min.)	Dimensions H x W x D (mm)	Net weight (kg)
3 102 01	10	24	1345 x 400 x 800	253
3 102 02	10	35	1345 x 400 x 800	283
3 102 03	10	56	1650 x 400 x 800	406
3 102 05	15	12	1345 x 400 x 800	267
3 102 06	15	20	1345 x 400 x 800	297
3 102 07	15	33	1650 x 400 x 800	420
3 102 09	20	8	1345 x 400 x 800	269
3 102 10	20	14	1345 x 400 x 800	299
3 102 11	20	36	1650 x 400 x 800	494
3 102 13	30	8	1345 x 400 x 800	305
3 102 14	30	13	1650 x 400 x 800	428
3 102 15	30	20	1650 x 400 x 800	488
3 102 17	40	8	1650 x 600 x 900	539
3 102 18	40	13	1650 x 600 x 900	598
3 102 19	40	22	1650 x 600 x 900	748
3 102 21	60	8	1650 x 600 x 900	620
3 102 22	60	14	1650 x 600 x 900	770

UPS empty for internal battery drawers				
	Nominal power kVA	Backup time (min.)	Dimensions H x W x D (mm)	Net weight (kg)
3 102 23	10	0	1650 x 400 x 800	140
3 102 24	15	0	1650 x 400 x 800	151
3 102 25	20	0	1650 x 400 x 800	162
3 102 26	30	0	1650 x 400 x 800	169
3 109 27	40	0	1650 x 600 x 900	241
3 109 28	60	0	1650 x 600 x 900	276

UPS empty for external battery cabinet				
	Nominal power kVA	Backup time (min.)	Dimensions H x W x D (mm)	Net weight (kg)
3 102 00	10	0	1345 x 400 x 800	118
3 102 04	15	0	1345 x 400 x 800	132
3 102 08	20	0	1345 x 400 x 800	134
3 102 12	30	0	1345 x 400 x 800	140
3 102 16	40	0	1650 x 600 x 900	255
3 102 20	60	0	1650 x 600 x 900	277
3 102 27	80	-	1650 x 600 x 980	315
3 102 28	100	-	1650 x 600 x 980	350
3 102 29	120	-	1650 x 793 x 800	430

Cat. Nos.	UPS with insulation transformer			
	Nominal power kVA	Backup time (min.)	Dimensions H x W x D (mm)	Net weight (kg)
3 102 30	10	0	1345 x 400 x 800	240
3 102 31	15	0	1345 x 400 x 800	250
3 102 32	20	0	1345 x 400 x 800	255
3 102 33	30	0	1345 x 400 x 800	285
3 102 34	40	0	1650 x 600 x 900	525
3 102 35	60	0	1650 x 600 x 900	575

UPS 208V				
	Nominal power kVA	Backup time (min.)	Dimensions H x W x D (mm)	Net weight (kg)
3 101 32	5	0	1345 x 400 x 800	118
3 101 33	7,5	0	1345 x 400 x 800	132
3 101 34	10	0	1345 x 400 x 800	134
3 102 78	15	0	1345 x 400 x 800	140
3 102 79	20	0	1650 x 600 x 900	255
3 102 96	30	0	1650 x 600 x 900	277
3 102 97	40	0	1650 x 600 x 800	315
3 102 98	50	0	1650 x 600 x 800	350
3 102 99	60	0	1650 x 793 x 800	430

Accessories	
	Description
3 109 18	Battery cabinet empty (for 60 blocks 55 Ah)
3 109 21	Internal cables kit for battery cabinet empty (for 60 blocks 55 Ah)
3 109 11	Battery drawers kit for Keor T 10-30 kVA (60 blocks 7-9 Ah)
3 109 12	Battery drawers kit for Keor T 40-60 kVA (60 blocks 7-9 Ah)
3 109 13	Internal battery cables kit for battery drawers Keor T 10-30 kVA
3 109 14	Internal battery cables kit for battery drawers Keor T 40-60 kVA
3 109 15	Parallel kit/UPS (PCB + 5 m cable)
3 109 16	Kit for both in & ext battery connections for 1345H

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

Keor T

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

Characteristics

3Ph version 400V (380-400-415V)	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
3Ph version 208V (200-208-220V)	KEOR T 5	KEOR T 7,5	KEOR T 10	KEOR T 15	KEOR T 20	KEOR T 30	KEOR T 40	KEOR T 50	KEOR T 60
Nominal power (kVA)	5	7,5	10	15	20	30	40	50	60
Active power (kW)	4,5	6,75	9	13,5	18	27	36	45	54

General characteristics

Technology	On-line double conversion VFI-SS-111
Waveform	Sinusoidal
Architecture	Stand Alone or Distributed Parallel up to 6 units

Input characteristics

Input voltage	380, 400, 415 V 3Ph+N+PE*, 200-208-220V 3Ph+N+PE**
Input frequency	45-65 Hz
Input voltage range (Ph-Ph)	± 15%
THD of input current	< 5% at full load
Compatibility with diesel generators	yes
Input power factor	> 0,99

Output characteristics

Output voltage	380, 400, 415 V 3Ph+N+PE*, 200-208-220V 3Ph+N+PE** (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	2,5:1
THD of output voltage	< 2% (at full linear load)
Output power factor	0,9
Output voltage tolerance	±1%
Overload capability	10min. at 125%, 60sec. at 150%
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
Internal Battery	Yes
Battery Test	Automatic or manual
Battery Recharge Profile	IU (DIN41773)

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)	1345/1650 x 400 x 800* 1345 x 400 x 800**	1650 x 600 x 900	1650 x 600 x 980	1650 x 793 x 800
Dimensions battery cabinet H x W x D (mm)	1650 x 800 x 900			

Ambient conditions

Operating temperature (°C)	0 ÷ 40		
Relative humidity (%)	20 ÷ 95% not condensing		
Protection index	IP20		
Noise at 1 m (dBA)	< 58	< 60	< 65

Compliance

Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3
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* for 3F 400V model

** for 3F 208V model

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

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

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

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



KEOR HPE 100



KEOR HPE 200

Model	UPS (with internal installable batteries)				
	Nominal power kVA	Active power kW	Backup time mins	Dimensions H x W x D (mm)	Net weight (kg)
Keor HPE 60	60	60	12	1800x560x940	250
Keor HPE 80	80	80	11	1800x560x940	300

	UPS (without batteries)				
	Nominal power kVA	Active power kW	Backup time mins	Dimensions H x W x D (mm)	Net weight (kg)
Keor HPE 60	60	60	-	1800x560x940	250
Keor HPE 80	80	80	-	1800x560x940	300
Keor HPE 100	100	100	-	1800x560x940	320
Keor HPE 125	125	125	-	1800x560x940	360
Keor HPE 160	160	160	-	1800x560x940	380
Keor HPE 200	200	200	-	1975x850x953	720

Options

Description

Serial interface RS-485 ModBus

SNMP card

(1)

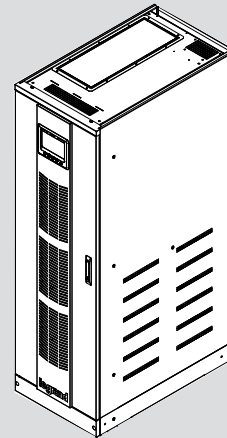
Parallel card interface KIT

Load-sync card interface kit

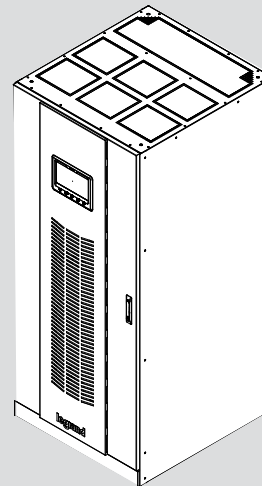
Isolation transformer

1 accessories to be defined at order time

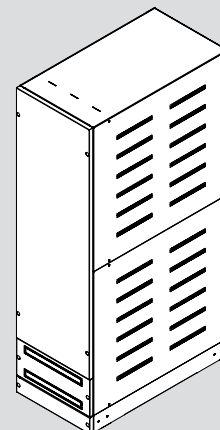
Keor HPE 60-80-100-125-160



Keor HPE 200



Keor HPE battery cabinet



NOTE: The stated Backup 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					
Input 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%					
Compatibility with diesel generators	Configurable for synchronism between the input and output frequencies, even for the highest frequency variations					
Input power factor	> 0,99					
Output characteristics						
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	<1% (with linear load), <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 Bypass					
Batteries						
Backup time with internal battery (mins)	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)					
Communication and management						
LCD Display	Four LED's to show status at a glance. Four menu-driven interface buttons.					
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					
Mechanical characteristics						
Dimensions H x W x D (mm)	1800 x 560 x 940					1975 x 850 x 953
Net Weight (kg)	250	300	320	360	380	720
Dimensions battery cabinet H x W x D (mm)	1800 x 503 x 945 (60 batteries)					
Ambient conditions						
Operating temperature (°C)	0÷40					
Relative humidity (%)	< 95% not condensing					
Protection index	IP20					
Noise at 1 m (dBA)	< 60					
Certifications						
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3					

Keor HP 100-125-160-200-250-300 400-500-600-800

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



KEOR HP 100



KEOR HP 400

Model	UPS (without batteries)			
	Nominal power kVA	Active power kW	Dimensions A X L X P (mm)	Net weight (kg)
KEOR HP 100	100	90	1670 x 815 x 825	625
KEOR HP 125	125	112,5	1670 x 815 x 825	660
KEOR HP 160	160	144	1670 x 815 x 825	715
KEOR HP 100	100	90	1670 x 815 x 825	625
KEOR HP 125	125	112,5	1670 x 815 x 825	660
KEOR HP 160	160	144	1670 x 815 x 825	715
KEOR HP 400	400	360	1920 x 1990 x 965	1820
KEOR HP 500	500	450	2020 x 2440 x 950	2220
KEOR HP 600	600	540	2020 x 2440 x 950	2400
KEOR HP 800	800	720	1920 x 3640 x 950	3600

Options

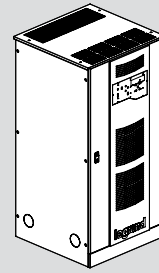
Description

- Empty battery cabinet with cables and protection
- Batteries 5 years / 10 years life time in cabinets or racks
- Battery switch box with protection: fuses
- Battery monitoring system
- BY PASS insulation transformer
- External maintenance bypass
- Top entry cable cabinet
- Remote control panel

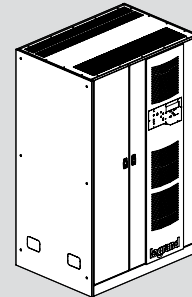
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1 accessories to be defined at order time

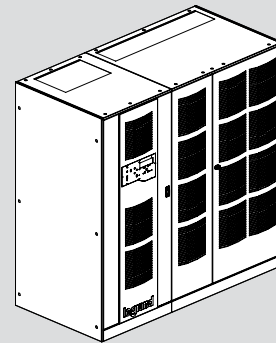
Keor HP 100-125-160



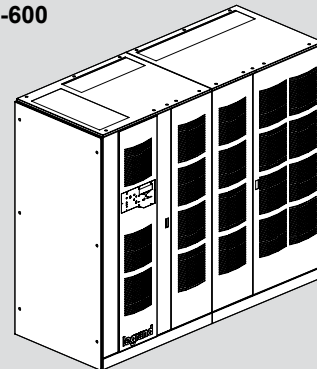
Keor HP 200-250-300



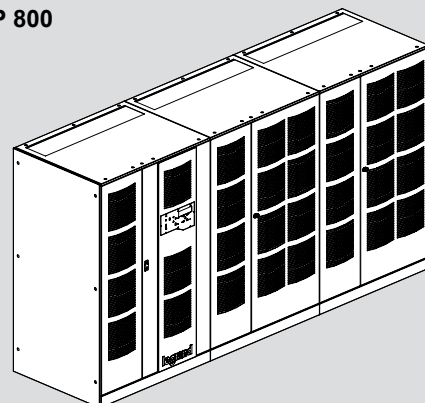
Keor HP 400



Keor HP 500-600



Keor HP 800



Keor HP 100-125-160-200-250-300 400-500-600-800

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

Characteristics										
General characteristics										
	100	125	160	200	250	300	400	500	600	800
Nominal power (kVA)	100	125	160	200	250	300	400	500	600	800
Active power (kW)	90	112,5	144	180	225	270	360	450	540	720
Technology	On-line double conversion VFI-SS-111									
Waveform	Sinusoidal									
Architecture	Conventional UPS, paralleleable up to 6 unit									
Input characteristics										
Input voltage	380-415 V 3Ph+N									
Input frequency	50-60 Hz ± 10% autosensing									
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									
Output characteristics										
Output voltage	380, 400, 415 V 3Ph+N selected									
Efficiency	up to 95%									
Output frequency (nominal)	50 /60 Hz selected ± 0,001%									
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%, 60 seconds at 150%, 10 seconds at 200%									
Efficiency in Eco mode	98%								>98%	
Bypass	Built-in Automatic and Maintenance Bypass						Built-in Automatic (optional Maintenance Bypass)			
Batteries										
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)									
Communication and management										
LCD Display	Four LED's to show status at a glance. Four menu-driven interface buttons. Four status at a glance LEDs									
Communication Ports	RS232 and USB serial ports (Optional RS485)									
Audible Alarm	Acoustic alarms and warnings, configurable delays									
Configuration Setting	Auto configuration by firmware, or manual by service engineer									
Net Interface Slot	Built-in dry contact PCB, optional SNMP card									
Emergency Power Off (EPO)	Yes									
Remote Management	Available									
Battery temperature probe	Yes									
Mechanical characteristics										
Dimensions H x W x D (mm)	1670 x 815 x 825			1905 x 1220 x 855			1920 x 1990 x 965	2020 x 2440 x 950	2020 x 2440 x 950	1920 x 3640 x 950
Net Weight (kg)	625	660	715	970	1090	1170	1820	2220	2400	3600
Dimensions battery cabinet H x W x D (mm)	1900x1400x830 (50 batteries) 1900x2800x830 (100 batteries)			1900x1400x860 (50 batteries) 1900x2800x860 (100 batteries)			1900 x 2800 x 860 (100 batteries)			
Ambient conditions										
Operating temperature (°C)	0 ÷ 40									
Relative humidity (%)	<95% not condensing									
Protection index	IP20									
Noise at 1 m (dBA)	< 60					<62				
Certifications										
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3									

FLEXIBLE
EXPANDABLE

REDUNDANT

APPLICATION FIELDS



Data center



Tertiary



Industry

MODULAR UPS

from 1,25 up to 480 kW



MEGALINE
Single-phase
modular UPS VFI,
from 1,25 up to 10kVA



TRIMOD HE
Three-phase
modular UPS VFI,
from 10 up to 80kW



ARCHIMOD HE
Three-phase
modular UPS VFI,
from 20 up to 120kW



Keor MOD
Three-phase
modular UPS VFI,
from 25 up to 250kW



ARCHIMOD HE240/480
Three-phase modular
UPS VFI,
from 240 up to 480kW

CHARACTERISTICS OF THE RANGE

Modular UPS enable the power supply to be sized exactly to requirements, without precluding any future expansion.

They are made up of “standard” modules that can be added to existing configurations to increase their power or Backup time.

Their innovative three-phase system, made up of individual single phase modules, provides the highest possible level of redundancy.

MEGALINE

SINGLE PHASE MODULAR UPS

**Redundant modular UPS,
expandable up to 10 kVA
with the best performance
levels in their category**

AVAILABLE IN THREE VERSIONS:

- SINGLE CABINET
- DOUBLE CABINET
- 19" RACK

All models have a configurable microprocessor control card, an LCD display unit, 1250 VA power modules and battery kits (BK) containing three 9 Ah batteries.

The single cabinet and 19" rack versions distribute powers of 1250 to 5000 VA, and can take up to 4 power modules 4 battery kits. To increase the Backup time, additional batteries can be added in dedicated cabinets, which are easy to connect.

The range also includes double cabinets. They consist of 2 cabinets: 1 power cabinet and 1 battery cabinet. The former houses up to eight 1250 VA modules, reaching a maximum power of 10 kVA. The latter can take up to 10 battery kits and an additional charger. To increase the Backup time still further, other identical battery cabinets can be added.





CLASS A/B (immunity emission)

All the MegaLine models comply with the most stringent standards in terms of both emission and immunity to electromagnetic interference so they can be used for any application, in either civil or industrial environments

ALARMS AND SIGNALS

An acoustic signal and high-visibility flashing on the backlit front panel ensure that any alarm signal is noticed immediately. The signals can be split into various categories based on their severity.



GREEN & NOT FLASHING - Normal Operation

Normal operation, no anomaly



YELLOW & FLASHING - Battery Mode

Battery operation, accompanied by a slow, intermittent alarm signal, which can be silenced



RED & FLASHING - Warning (together with an acoustic alarm signal)

- Operation blocked
- Output voltage anomaly

RED & NOT FLASHING - Severe alarm (together with an acoustic alarm signal)

- Failure of one or more power modules
- Incorrect connection of input neutral
- Overload

TRIMOD HE & ARCHIMOD HE

HIGH efficiency
HIGH performance
LOW environmental impact

THE TECHNOLOGY EVOLUTION

Legrand's modular UPS know-how goes back more than 20 years, when the first ever modular UPS were introduced in 1993. Since then, continuous firmware development and research on control and hardware components have led to no stop improvements in system reliability, quality and technical performance.

Continuous research combined with modern production methods has led Legrand to offer the market a cutting-edge, top-performing product: certified efficiency up to 96% and unity power factor.

Combining high density with a structural design that optimises the space, the new TRIMOD HE and ARCHIMOD HE UPS are the ideal solution for advanced energy management and cost containment.



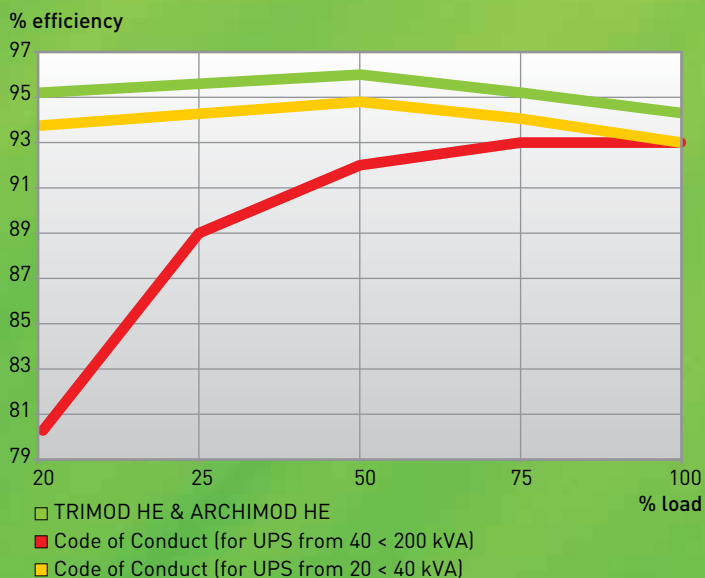
kVA = kW
POWER FACTOR 1

INCREASED POWER

Thanks to their unity power factor the new TRIMOD HE and ARCHIMOD 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.

GREATER EFFICIENCY 96%

The European Code of Conduct requires a minimum value of 92%. TRIMOD HE and ARCHIMOD HE are up to 4% more efficient, thus effectively dividing by 2 all UPS energy losses.



TRIMOD HE & ARCHIMOD HE

**FLEXIBILITY
MODULARITY
EXPANSION**

Gradual power adaptation

The three-phase UPS are made up of individual single phase modules which are redundant and «selfconfiguring», so that power can be increased quickly and safely.

Optimisation of work

The compact and lightweight power modules (only 8.5 kg) make the UPS easy to transport, install and maintain.

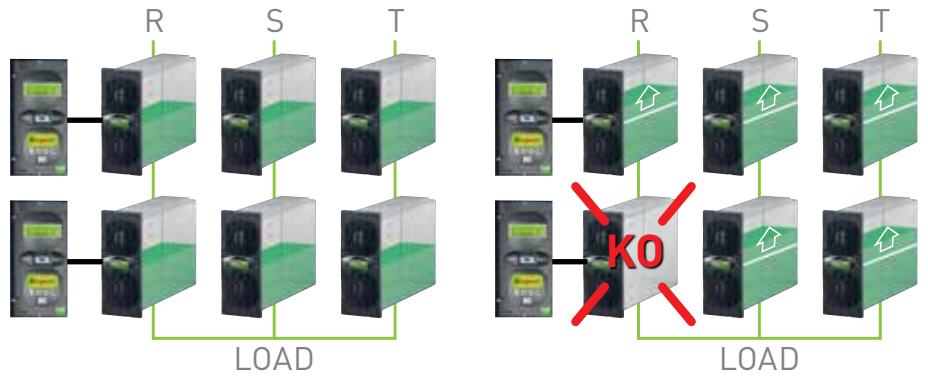


Extending the Backup time

The Backup time can be extended either by adding battery trays in the same cabinet or by adding another battery cabinet, depending on the power of the UPS and the Backup time required. Non-modular compact battery cabinets are also available for extending the Backup time to several hours.

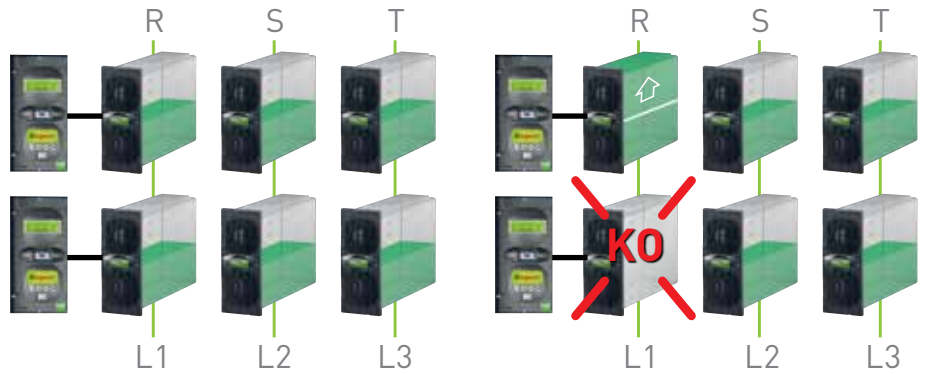
Redundancy on the single phase load

In a three-phase power supply system with single phase loads, if one of the modules fails, there is no loss of power as the power is distributed over the other modules that are still operational.



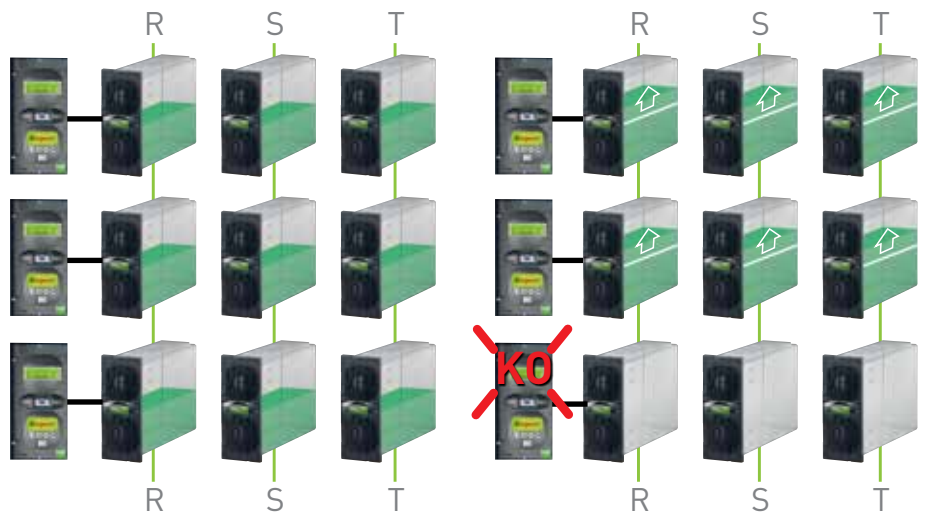
Redundancy on the phases

In a system with three-phase outputs, it is possible to create redundancy on each individual phase. If one of the power modules fails, the other modules for this phase take over from the faulty module.



Redundancy on the control

In UPS that include several control modules, the failure of one of the control modules results in the modules it controls being stopped. However continuity of service is assured by the automatic distribution of the lost power over the other modules.



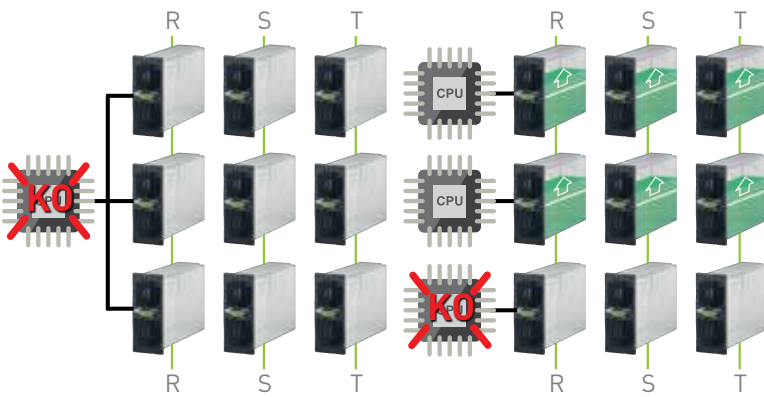
HIGH LEVELS OF REDUNDANCY

Thanks to the construction technology of the TRIMOD HE and ARCHIMOD HE UPS systems, you can set various redundancy levels so that maximum service continuity is always guaranteed.

TRIMOD HE

POWER CABINET WITH MULTI CONTROL BOARD

In order to increase service continuity and consequently decrease failures (limit the single point of failure) the new cabinet are provided with more control modules, from 1 to a maximum of 4, so as to ensure redundancy also on control.



Redundancy on the control

In UPS systems incorporating several control modules, failure of one of the control boards results in the modules it controls being switched off. However, continuity of service is assured by automatic distribution of the lost power over the other modules.

HOT-SWAP

Thanks to the multi control board system you can replace the power modules without having to turn off the UPS.

Separate batteries

The new multi control board cabinet, also allows you to associate each control a separate battery pack.



POWER CABINET WITH **DUAL INPUT** FUNCTION

TRIMOD HE, in addition to the standard cabinet, it offers cabinet with power up to 80 kW and DUAL INPUT function. The new cabinet can be fed two AC sources is source separated: the configuration can be selected at installation time and easily obtained by removing a bridge from the input terminals.

POSSIBLE CONFIGURATIONS

SCALABLE SOLUTION
FROM 40 kW UP TO 80 kW



SCALABLE SOLUTION
FROM 60 kW UP TO 80 kW



REDUNDANCY SOLUTION
60 kW N+1



ARCHIMOD HE

MODULAR ARCHITECTURE UPS

ARCHIMOD HE: expandable, modular architecture UPS, power from 20 to 120 kW, in a 19 rack cabinet.

The system comprises a set of standard, pre-assembled components which simplify and optimise the design and building of critical power infrastructures.

The innovative modular design of these UPS means that the availability of the power can be optimised, the flexibility of the system increased and the total cost of ownership (TCO) reduced.



FLEXIBLE
EXPANDABLE

REDUN



1 Control module

Equipped with a microprocessor, it manages 3 power modules. If it is used with a power expansion module, it can manage up to 6 power modules, thus increasing the power from 20 to 40 kW. It has a screen and a multifunction keypad for monitoring the operating parameters of the UPS and for configuring numerous functions. It can be connected in parallel to other control modules and used with power expansion modules. The front panel has a backlit status indicator for immediate checking of the operating status of the system and an RS 232 port for connecting a PC for maintenance.

2 Power modules

The power modules (nominal power 6.7 kW) are extremely compact and easy to handle. They have a plug-in hot swap system, making them quick to install and maintain. They work in parallel with all modules that are present to ensure optimum system performance.

3 Power expansion module

This must be used with a control module. It increases the power from 20 to 40 kW and can be used to establish individual redundancy on each phase.

4 Battery modules

Each module contains batteries that can be connected in series, forming separate strings each with a very low safe DC voltage. The compactness and functionality of the single (plug-in) module make it easy to handle, and expansion operations are possible without any modification of the structure of the installed system.

5 Distribution module

This is used to configure the distribution type of the UPS (three-phase/three-phase, three-phase/single phase, single phase/single phase or single phase/three-phase). It has I/O connection blocks, handling and protection devices, and the connection for additional battery cabinets. The power supply can be configured on two separate input sources (main and Backup).

6 Cable entry

Special sleeves enable entry and exit of the input and output cables, via the top and via the bottom.

ARCHIMOD HE 240/480



FULLY INTEGRATED HIGH POWER SOLUTIONS



Advanced technology

The connections between the UPS and the distribution enclosure can be integrated in the same solution, making installation easier and tidy.

Visual & technical coordination

The new ARCHIMOD HE 240/480 is available in 2 colours (RAL7016-RAL7035), with the same aesthetics as the front panel of LEGRAND distribution enclosures.

Turnkey solutions

Legrand offers a fully coordinated UPS and power distribution switchboard range; one single supplier for any secure power need.

ARCHIMOD HE 240/480

**FRONT-ACCES
INSTALLATION
AND MAINTENANCE**



AS A LEADING MANUFACTURER OF POWER DISTRIBUTION ENCLOSURES, LEGRAND IS FULLY AWARE OF THE INSTALLATION REQUIREMENTS OF THESE SYSTEMS. THE ARCHIMOD HE240/480 RANGE HAS BEEN DEVELOPED TO SIMPLIFY ALL PHASES OF INSTALLATION, POSITIONING AND CONNECTION. THE UPS IS DESIGNED WITH A LARGE AMOUNT OF AVAILABLE SPACE FOR CABLE ENTRY AND BENDING.



Dedicated connection solutions

The connection cabinet has been designed to fit several cables with a large cross-section. The switches are fitted with special terminals to simplify connection of the cables.

User-friendly interface

The display position makes it easy to read and navigate the menu. All communication ports are fitted on the front panel below the display, allowing faster control and testing. A cable management system is available for the communication cables. An acoustic signal and high-visibility flashing on the backlit front panel ensure that any alarm signal is noticed immediately. The signals can be split into various categories according to their severity.



Designed to fit any location

Compact and lightweight components simplify and optimise the installation in any location. The structure without the power modules weighs only 300 kg, making it easy to position the UPS in the equipment room or in its final destination.

Visual and mechanical safety

The status of the switches is always visible via the position of the handle. When the switches are closed the handle prevents the wiring cabinet from opening, ensuring complete safety of operation.





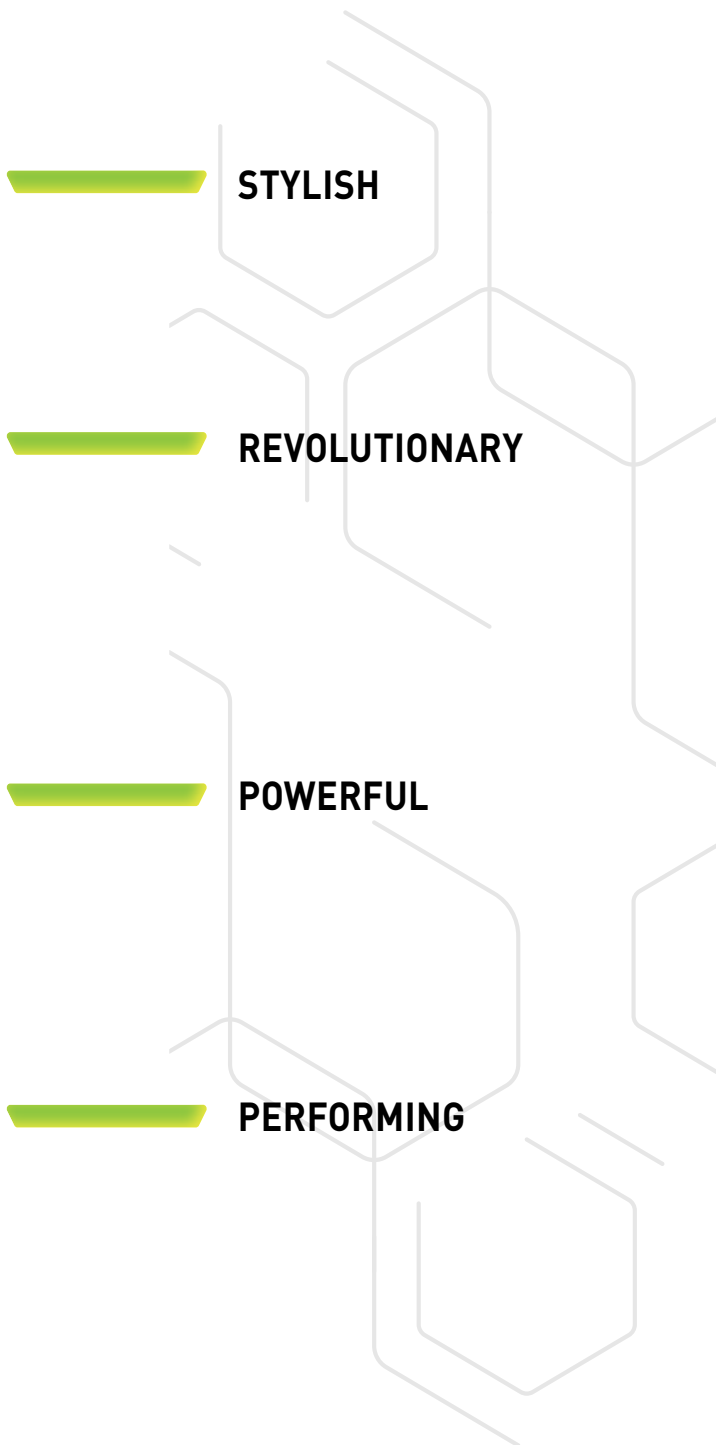
Keor MOD



legrand

Keor MOD

TECHNOLOGY AND DESIGN



STYLISH

The elegance of the design and the skilful choice of materials have joined forces to create a modern and cutting-edge machine, a UPS with a highly emotional DNA boasting market-leading performance.

REVOLUTIONARY

All the elements comprising the system have been designed to ensure maximum reliability and performance, without forsaking its ease of installation and maintenance. The use of light colours and highly reflective surfaces contribute to reducing environmental lighting in technical rooms (DATA CENTRES), and reduce consumptions in line with a GREEN approach.

POWERFUL

The **Keor MOD** power module is the smallest 25 kW three-phase module available on the market; its high power density (1136 W/dm³) makes it possible to achieve configurations of 125 kW with 5.2 minutes of autonomy (internal batteries) or 250 kW in less than 1m² of space on the ground with the door open.

PERFORMING

- Double conversion efficiency up to 96.8% (from 20% to 50% of the load)
- Efficiency in ECO mode up to 99%.
- Output power factor = 1
- Hot-swappable modules.
- Modular redundancy in N+1 configuration.
- Intelligence distributed between modules.
- UPS system capacity up to 600 kW.
- Decentralised by-pass.
- Reduced battery charging times.

Keor MOD

25 KW POWER MODULE IN JUST 2 RACK UNITS

Unique in its kind, Keor MOD introduces the new Structured Energy Flow system, effectively eliminating all the connection cables inside the power module.

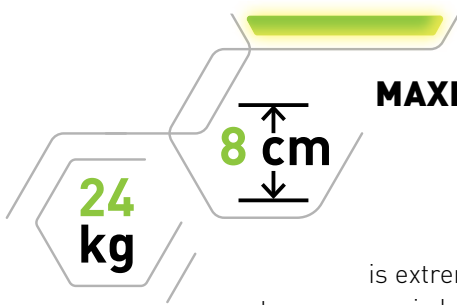
The connections between the various power sections are achieved by the structure that physically connects them.

This results in an exceptionally high level of reliability.

The power module houses the following components: input PFC, three-level inverter, integrated and independent control logic, battery charger, static and electromechanical by-pass.

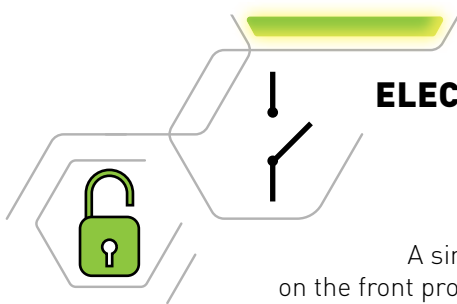
The Keor MOD power module is equipped with "System On Chip" type control technology which, unlike the conventional version (DSP based), contains a dual Core ARM A9 processor, a high performance FPGA and a set of advanced devices within one single component.

This technological choice provides an impressive range of advantages in terms of processing power, speed and versatility.



MAXIMUM MANOEUVRABILITY

The power module, is extremely compact and integrates two ergonomic handles to facilitate extraction and insertion of the module. Its light weight means it can also be handled by a single person.



ELECTRICAL AND MECHANICAL SAFETY

A simple and practical "SWITCH" on the front provides the connection and the disconnection both mechanical and electrical, which prevents any incorrect or involuntary removals.



INSTANT COMMUNICATION

Distinctive element of all the Legrand UPS, **Keor MOD** also integrates a Led Status Bar (Multicoloured status bar) with traffic light type coding for the immediate display of the actual operating status.

«HOT SWAP» DESIGN

Thanks to the hot swap functions, plug and play and the total independence of each power module, all maintenance phases and any power expansion are extremely swift and simple.

CONTROLLED NOISE LEVEL

The control of the cooling fans is performed independently based on the load and the temperature of the single power stage, hence decreasing energy consumptions and the noise level of the system.



Keo MOD

EXCLUSIVE TOUCH SCREEN DISPLAY

PATENT PENDING

Rotating, unique functionality

The 10" touch screen display provides a simplified control panel packed with information, alerts and settings and is also equipped with interactive icons to make navigation and selection of the functions to be controlled quick and simple.

The possibility of being able to rotate the Display inwards by 180° simplifies and speeds up the configuration and maintenance phases.



10 inches with innovative graphics

The display is positioned vertically so you have both the operating block diagram and the UPS layout with all the available information on the same screen.

Intuitive and user friendly

All the display icons, including the operating panel, are interactive so as to facilitate navigation and the setting of customisable functions.



INTERNAL BATTERIES UP TO 125 KW

Safe extraction

The battery drawers can be easily extracted using the handle on the front.

The mechanical anti-extraction stop prevents complete extraction of the drawer, preventing accidental falling and allowing operators to work in complete safety.



Light and dividable

The batteries inside the drawer are divided into 4 blocks, each with 6 batteries; this reduces weight (<16 kg each) and avoids direct contacts with dangerous voltages during maintenance phases.



Ease of handling

Each 6-battery block can easily be removed using the integrated handle.

The replacement of individual sections requires very little time and guarantees swift maintenance operations.



MEGALINE

Modular UPS -Single-phase On-line double conversion VFI



Cat. Nos.	Single cabinet (German standard)				
	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets	Weight (kg)
3 103 50	1250	875	13	1	23,5
3 103 52	2500	1750	13	1	34
3 103 54	3750	2625	13	1	43
3 103 56	5000	3500	13	1	53

	Double cabinet				
	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets	Weight (kg)
3 103 60 + 3 107 78	5000	3500	13	2	24+50
3 103 63 + 3 107 79	6250	4375	13	2	27+58
3 103 66 + 3 107 80	7500	5250	13	2	29+65
3 103 69 + 3 107 81	8750	6125	13	2	32+73
3 103 72 + 3 107 82	10000	7000	13	2	34+80

	Single cabinet (French standard)				
	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets	Weight (kg)
3 103 42	1250	875	13	1	23.5
3 103 43	2500	1750	13	1	34
3 103 44	3750	2625	13	1	43
3 103 45	5000	3500	13	1	53

	Single cabinet (British standard)				
	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets	Weight (kg)
3 103 46	1250	875	13	1	23.5
3 103 47	2500	1750	13	1	34
3 103 48	3750	2625	13	1	43
3 103 49	5000	3500	13	1	53

Cat. Nos.	Single cabinet - without batteries			
	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets
3 103 51	1250	875	-	1
3 103 53	2500	1750	-	1
3 103 55	3750	2625	-	1
3 103 57	5000	3500	-	1

	Double cabinet - without batteries			
	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets
3 103 60 + 3 108 59	5000	3500	-	2
3 103 63 + 3 108 59	6250	4375	-	2
3 103 66 + 3 108 59	7500	5250	-	2
3 103 69 + 3 108 59	8750	6125	-	2
3 103 72 + 3 108 59	10000	7000	-	2

		Battery extensions	
	with charger	Description	
3 107 75	3 107 86	Cabinet with 1 BK	
3 107 76	3 107 87	Cabinet with 2 BK	
3 107 77	3 107 88	Cabinet with 3 BK	
3 107 78	3 107 89	Cabinet with 4 BK	
3 107 79	3 107 90	Cabinet with 5 BK	
3 107 80	3 107 91	Cabinet with 6 BK	
3 107 81	3 107 92	Cabinet with 7 BK	
3 107 82	3 107 93	Cabinet with 8 BK	
3 107 83	3 107 94	Cabinet with 9 BK	
3 107 84	3 107 95	Cabinet with 10 BK	

Accessories	
	Description
3 108 35	Power module (PW 1250)
3 108 57	Single cabinet Backup extension (MegaLine BK/1)
3 108 58	Double cabinet Backup extension (MegaLine BK/2)
3 108 59	Empty battery cabinet
3 108 60	Y cable for connecting a second additional battery cabinet
3 108 61	Battery cabinet extension kit for tower configuration (PL MegaLine cable)
3 108 62	Manual bypass for single cabinet (BP/1)
3 108 63	Manual bypass for double cabinet (BP/2)
3 107 85	Additional charger (CB 36)
3 109 72	Relay interface kit

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

MEGALINE

Modular UPS -Single-phase On-line double conversion VFI

Characteristics									
General characteristics	3 103 42	3 103 43	3 103 44	3 103 45	3 103 60 +	3 103 63 +	3 103 66 +	3 103 69 +	3 103 72 +
	3 103 46	3 103 47	3 103 48	3 103 49	3 107 78	3 107 79	3 107 80	3 107 81	3 107 82
	3 103 50	3 103 52	3 103 54	3 103 56					
	Single cabinet				Double cabinet				
Nominal power (VA)	1250	2500	3750	5000	5000	6250	7500	8750	10000
Active power (W)	875	1750	2625	3500	3500	4375	5250	6125	7000
Max. expansion (VA)	5000				10000				
Max. expansion (W)	3500				7000				
Technology	On-line double conversion VFI-SS-111								
Architecture	Modular, expandable, N+X redundant with 1250 VA power cards, contained in a single cabinet								
Input characteristics									
Nominal input voltage	230 V								
Input voltage range	184 V to 264 V at 100% load								
Minimum operating voltage	100 V at 50% load								
THD of input current	< 3%								
Input power factor	> 0.99 at 20% load								
Input frequency	50 Hz/60 Hz ± 2% autosensing								
Output characteristics									
Output voltage	230 V ± 1%								
Output frequency	50 Hz/60 Hz synchronised								
THD of output voltage	< 1% with non-linear load								
Waveform	Sinusoidal								
Peak factor	3:1								
Efficiency	up to 92%								
Overload capacity	300% for 1 s – 200% for 5 s – 150% for 30 s								
Backup time									
Backup time (min)	13								
Extension of Backup time	Yes								
Equipment									
Bypass	Automatic, internally synchronised, static and electromechanical (for overloads and operating problems)								
Signalling and alarms	Wide screen with 4 alphanumeric lines, multi-coloured status indicator, audible signalling								
Communication ports	1 RS 232 port, 2 logic level ports								
Communicator UPS software	Can be downloaded free of charge (after requesting an activation code)								
Protection	Electronic devices for protection against overloads, short-circuits and excessive battery discharge. Operation stops at end of Backup time. Inrush current limiter on start-up. Sensor for correct neutral switching. Back-feed protection (electrical safety insulation of the input plug during battery-based operation). EPO (emergency power off) contact.								
I/O mains connection	German standard/terminal connector with universal multi-socket outlet (Italian/German standard)								
Mechanical characteristics									
Net weight (kg)	23,5	34	43	53	24 + 50	26,5+57,5	29 + 65	31,5+72,5	34 + 80
Dimensions (H x W x D) (mm)	475 x 270 x 570				2 x 475 x 270 x 570				
Installed power cards	1	2	3	4	4	5	6	7	8
Free power expansion slots	3	2	1	-	4	3	2	1	-
Installed battery kits	1	2	3	4	4	5	6	7	8
Free Backup time extension slots	3	2	1	-	6	5	4	3	2
Ambient conditions									
Ambient operating temperature (°C)	0 to 40								
Protection index	IP 21								
Relative humidity (%)	20 to 80								
Noise at 1 m (dBA)	< 40								
Certifications									
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3								

MEGALINE RACK

Modular UPS -Single-phase On-line double conversion VFI



3 103 85



3 107 96



3 108 62



3 107 85



3 109 73

- Wide input voltage and frequency range
- Operating frequency: 50 or 60 Hz with auto-recognition
- 50-60 Hz frequency conversion in both directions
- Extension of the input frequency range for operation with gensets
- Eco mode (energy-saving) operation
- Load waiting mode operation (protection on request)

- Output voltage can be adjusted in 1 volt steps from front panel
- Low noise
- Internal and external temperature measurement
- Ventilation control according to temperature and load
- Designed for remote emergency stop

Cat. Nos. RACKS (German standard)

Cat. Nos.	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets	Weight (kg)
3 103 79	1250	875	13	1	23.5
3 103 81	2500	1750	13	1	34
3 103 83	3750	2625	13	1	43
3 103 85	5000	3500	13	1	53

Cat. Nos. Backup time extensions

Cat. Nos.	Nominal power (VA)	Additional BK	Expansion (min)
3 103 87	1250	1	30
3 103 88	1250	2	52
3 103 89	1250	3	75
3 103 90	2500	1	22
3 103 91	2500	2	30
3 103 92	3750	1	18

RACKs (French standard)

Cat. Nos.	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets	Weight (kg)
3 103 34	1250	875	13	1	23.5
3 103 35	2500	1750	13	1	34
3 103 36	3750	2625	13	1	43
3 103 37	5000	3500	13	1	53

Battery expansions for Rack UPS

Cat. Nos.	Description
3 107 96	Rack with 1 BK
3 107 97	Rack with 2 BK
3 107 98	Rack with 3 BK
3 107 99	Rack with 4 BK
3 108 00	Rack with 1 BK with charger
3 108 01	Rack with 2 BK with charger
3 108 02	Rack with 3 BK with charger
3 108 03	Rack with 4 BK with charger

RACKS (British standard)

Cat. Nos.	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets	Weight (kg)
3 103 38	1250	875	13	1	23.5
3 103 39	2500	1750	13	1	34
3 103 40	3750	2625	13	1	43
3 103 41	5000	3500	13	1	53

Accessories

Cat. Nos.	Description
3 108 35	Power module (PW 1250)
3 108 04	Empty battery rack cabinet
3 108 62	Manual bypass for single rack (BP/1)
3 107 85	Additional charger (CB 36)
3 109 72	Relay interface kit
3 109 73	Telescopic runner kit for 6U rack

RACKS - without batteries

Cat. Nos.	Nominal power (VA)	Active power (W)	Backup time (min)	Number of cabinets
3 103 80	1250	875	-	1
3 103 82	2500	1750	-	1
3 103 84	3750	2625	-	1
3 103 86	5000	3500	-	1

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

MEGALINE RACK

Modular UPS -Single-phase On-line double conversion VFI

Characteristics

General characteristics	3 103 34 3 103 38 3 103 79	3 103 35 3 103 39 3 103 81	3 103 36 3 103 40 3 103 83	3 103 37 3 103 41 3 103 85
Nominal power (VA)	1250	2500	3750	5000
Active power (W)	875	1750	2625	3500
Max. expansion (VA)	5000			
Max. expansion (W)	3500			
Technology	On line doppia conversione (VFI-SS-111)			
Architecture	Modular, expandable, N+X redundant with 1250 VA power cards, contained in a single rack			
Input characteristics				
Nominal input voltage	230 V			
Input voltage range	184 V to 264 V at 100% load			
Minimum operating voltage via mains	100 V at 50% load			
THD of input current	< 3%			
Input power factor	> 0.99 at 20% load			
Input frequency	50 Hz/60 Hz ± 2% autosensing			
Output characteristics				
Output voltage	230 V ± 1%			
Output frequency	50 Hz/60 Hz synchronised			
THD of output voltage	< 1% with non-linear load			
Waveform	Sinusoidal			
Peak factor	3:1			
Efficiency	up to 92%			
Overload capacity	300% for 1 s – 200% for 5 s – 150% for 30 s			
Backup time				
Backup time (min)	13			
Extension of Backup time	Yes			
Equipment				
Bypass	Automatic, internally synchronised, static and electromechanical (for overloads and operating problems).			
Signalling and alarms	Large screen with 4 alphanumeric lines, multi-coloured status indicator, audible signalling			
Communication ports	1 RS 232 port, 2 logic level ports			
Communicator UPS software	Can be downloaded free of charge (after requesting an activation code)			
Protection	Electronic devices for protection against overloads, short-circuits and excessive battery discharge. Operation stops at end of Backup time. Inrush current limiter on start-up. Sensor for correct neutral switching. Back-feed protection (electrical safety insulation of the input plug during battery-based operation). EPO (emergency power off) contact			
I/O mains connection	German standard/terminal connector with universal multi-socket outlet (Italian/German standard)			
Mechanical characteristics				
Net weight (kg)	23,5	34	43	53
Dimensions (H x W x D) (mm)	266 x 483 x 582			
Installed power cards	1	2	3	4
Free power expansion slots	3	2	1	-
Installed battery kits	1	2	3	4
Free Backup time extension slots	3	2	1	-
Ambient conditions				
Ambient operating temperature (°C)	0 ÷ 40			
Protection index	IP21			
Relative humidity (%)	20 to 80			
Noise at 1 m (dBA)	< 40			
Certifications				
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3			

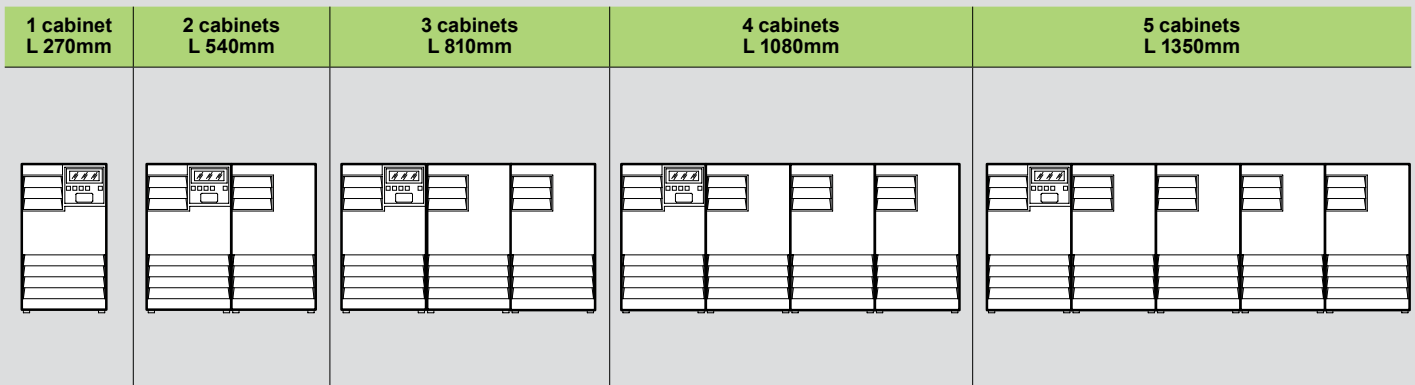
MEGALINE

Long Backup time table for single cabinet and double cabinet versions

Model	Power	Backup time	Number of cabinets and dimensions W x H x D (mm)	Cat. Nos.
Single cabinet				
	1.250 VA	30'	1x (270 x 475 x 570)	3 103 73
	1.250 VA	52'	1x (270 x 475 x 570)	3 103 74
	1.250 VA	75'	1x (270 x 475 x 570)	3 103 75
	2.500 VA	22'	1x (270 x 475 x 570)	3 103 76
	2.500 VA	30'	2x (270 x 475 x 570)	3 103 77
	2.500 VA	52'	2x (270 x 475 x 570)	3 103 52 + 3 107 78
	2.500 VA	63'	2x (270 x 475 x 570)	3 103 52 + 3 107 79
	3.750 VA	18'	1x (270 x 475 x 570)	3 103 78
	3.750 VA	29'	2x (270 x 475 x 570)	3 103 54 + 3 107 77
	3.750 VA	44'	2x (270 x 475 x 570)	3 103 54 + 3 107 79
	3.750 VA	67'	2x (270 x 475 x 570)	3 103 54 + 3 107 82
	5.000 VA	22'	2x (270 x 475 x 570)	3 103 56 + 3 107 76
	5.000 VA	30'	2x (270 x 475 x 570)	3 103 56 + 3 107 78
	5.000 VA	46'	2x (270 x 475 x 570)	3 103 56 + 3 107 81
	5.000 VA	63'	2x (270 x 475 x 570)	3 103 56 + 3 107 84
Double cabinet				
	5.000 VA	22'	2x (270 x 475 x 570)	3 103 60 + 3 107 80
	5.000 VA	30'	2x (270 x 475 x 570)	3 103 60 + 3 107 82
	5.000 VA	46'	3x (270 x 475 x 570)*	3 103 60 + 3 107 84 + 3 107 75
	5.000 VA	63'	3x (270 x 475 x 570)*	3 103 60 + 3 107 84 + 3 107 78
	6.250 VA	20'	2x (270 x 475 x 570)	3 103 63 + 3 107 81
	6.250 VA	30'	2x (270 x 475 x 570)	3 103 63 + 3 107 84
	6.250 VA	47'	3x (270 x 475 x 570)*	3 103 63 + 3 107 84 + 3 107 78
	6.250 VA	60'	3x (270 x 475 x 570)*	3 103 63 + 3 107 84 + 3 107 81
	7.500 VA	18'	2x (270 x 475 x 570)	3 103 66 + 3 107 82
	7.500 VA	30'	3x (270 x 475 x 570)*	3 103 66 + 3 107 84 + 3 107 76
	7.500 VA	48'	3x (270 x 475 x 570)*	3 103 66 + 3 107 84 + 3 107 81
	7.500 VA	59'	3x (270 x 475 x 570)*	3 103 66 + 3 107 84 (x2)
	8.750 VA	20'	2x (270 x 475 x 570)	3 103 69 + 3 107 84
	8.750 VA	30'	3x (270 x 475 x 570)*	3 103 69 + 3 107 84 + 3 107 78
	8.750 VA	45'	3x (270 x 475 x 570)*	3 103 69 + 3 107 84 + 3 107 83
	8.750 VA	61'	4x (270 x 475 x 570)*	3 103 69 + 3 107 84 (x2) + 3 107 78
	10.000 VA	22'	3x (270 x 475 x 570)*	3 103 72 + 3 107 84 + 3 107 76
	10.000 VA	30'	3x (270 x 475 x 570)*	3 103 72 + 3 107 84 + 3 107 80
	10.000 VA	46'	4x (270 x 475 x 570)*	3 103 72 + 3 107 84 (x2) + 3 107 76
	10.000 VA	60'	4x (270 x 475 x 570)*	3 103 72 + 3 107 84 (x2) + 3 107 81

* This configuration requires the use of a Y cable Cat. No. 3 108 60. The number of cables required is equal to the total number of cabinets minus 2.

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



MEGALINE RACK

Long Backup time table rack version

Model	Power	Backup time	Number of cabinets and dimensions W x H x D (mm)	Cat. Nos.
Rack				
	1.250 VA	30'	1 (6U)	3 103 87
	1.250 VA	52'	1 (6U)	3 103 88
	1.250 VA	75'	1 (6U)	3 103 89
	2.500 VA	22'	1 (6U)	3 103 90
	2.500 VA	30'	1 (6U)	3 103 91
	2.500 VA	52'	2 (6U + 3U)	3 103 81 + 3 107 99
	2.500 VA	63'	3 (6U + 2x3U)	3 103 81 + 3 107 99 + 3 107 96
	3.750 VA	18'	1 (6U)	3 103 92
	3.750 VA	29'	2 (6U + 3U)	3 103 83 + 3 107 98
	3.750 VA	44'	3 (6U + 2x3U)	3 103 83 + 3 107 99 + 3 107 96
	3.750 VA	67'	3 (6U + 2x3U)	3 103 83 + 3 107 99 (x2)
	5.000 VA	22'	2 (6U + 3U)	3 103 85 + 3 107 97
	5.000 VA	30'	2 (6U + 3U)	3 103 85 + 3 107 99
	5.000 VA	46'	3 (6U + 2x3U)	3 103 85 + 3 107 99 + 3 107 98
	5.000 VA	63'	4 (6U + 3x3U)	3 103 85 + 3 107 97 + 3 107 99 (x2)
			6U= 483 x 266 x 582 3U= 483 x 133x 584	

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

1 cabinet H 266mm (6U)	2 cabinets H 532mm (6U+3U)	3 cabinets H 798mm (6U+2x3U)	4 cabinets H 1064mm (6U+3x3U)	5 cabinets H 1330mm (6U+4x3U)

TRIMOD HE

Double conversion VFI three-phase modular UPS



3 104 42



3 108 71



3 108 45

Cat. Nos.	UPS	Power kW	Backup time (min)	no. and type of cabinet	Weight (kg)
3 104 42		10	11	1A	167
3 104 43		10	21	1A	223
3 104 44		10	35	1A	279
3 104 02		10	49	1B	350
3 104 45		15	13	1A	220
3 104 46		15	21	1A	279
3 104 07		15	29	1B	350
3 104 47		20	9	1A	220
3 104 48		20	14	1A	279
3 104 13		20	20	1B	350
3 104 17		30	8	1A	325
3 104 19 + 3 107 63		40	8	2A	564
3 104 20 + 2 x 3 107 58		60	9	3A	830

*Cabinet A h=1370, Cabinet B h=1650

Accessories	
Description	
3 108 69	3.4 kW power module
3 108 71	5 kW power module
3 108 73	6.7 kW power module
3 108 51	Additional 15 A battery charger module

Battery accessories	
Description	
3 108 54	Kit of 4 empty battery drawers
3 108 45	Single drawer with 5 x 9Ah batteries (installable in multiples of 4)
3 108 75	Single drawer with 5 9Ah long life batteries (installable in multiples of 4)
3 109 29	Kit for separate batteries (only for 80 kW)

Additional empty battery cabinets	
Description	
3 108 05	16-drawer modular battery cabinet
3 108 06	20-drawer modular battery cabinet

Additional battery cabinets with 9Ah batteries	
Description	
3 107 60	Modular battery cabinet with 4 drawers
3 107 61	Modular battery cabinet with 8 drawers
3 107 62	Modular battery cabinet with 12 drawers
3 107 63	Modular battery cabinet with 16 drawers
3 107 64	Modular battery cabinet with 20 drawers

Cat. Nos.	Power cabinet	Power kW	NO. of installable battery drawers	NO. of phases	Type of cabinet	Weight (kg)
3 103 96		10	12	1-1 / 3-3 / 3-1 / 1-3	A	120
3 103 97		10	16	1-1 / 3-3 / 3-1 / 1-3	B	155
3 104 08		15	12	1-1 / 3-3 / 3-1 / 1-3	A	120
3 104 03		15	16	1-1 / 3-3 / 3-1 / 1-3	B	155
3 104 14		20	12	1-1 / 3-3 / 3-1 / 1-3	A	120
3 104 09		20	16	3-3	B	155
3 104 18		30	-	1-1/3-3/3-1/1-3	A	146
3 104 15		30	12	3-3	B	181
3 104 19		40	-	3-3	A	146
3 104 20		60	-	3-3	A	165

Power cabinets (empty)					
Type and NO. of installable power module	NO. of installable battery drawers	NO. of phases	Type of cabinet	Weight (kg)	
3 104 22	3 x 3,4 kW	12	1-1 / 3-3 / 3-1 / 1-3	A	85
3 104 31	3 x 3,4 kW	16	1-1 / 3-3 / 3-1 / 1-3	B	98
3 104 23	3 x 5 o 6,7 kW	12	1-1 / 3-3 / 3-1 / 1-3	A	90
3 104 32	6 x 3,4 kW	12	1-1 / 3-3 / 3-1 / 1-3	B	102
3 104 33	3 x 5 o 6,7 kW	16	1-1 / 3-3 / 3-1 / 1-3	B	102
3 104 24	6 x 5 kW	-	3-3	A	80
3 104 25	6 x 5 kW	-	1-1/3-3/3-1/1-3	A	84
3 104 34	6 x 5 kW	12	3-3	B	104
3 104 26	6 x 6,7 kW	-	3-3	A	80
3 104 27	9 x 6,7 kW	-	3-3	A	90

DUAL INPUT Power cabinets (empty)						
Type and NO. of installable power module	NO. of installable battery drawers	NO. of phases	Type of cabinet	Weight (kg)	NO. CTRL boards	
3 104 65	3 x 3,4 kW	12	1-1 / 3-3 / 3-1 / 1-3	A	86	1
3 104 66	3 x 5 o 6,7 kW	12	1-1 / 3-3 / 3-1 / 1-3	A	89	1
3 104 67	3 x 5 o 6,7 kW	16	1-1 / 3-3 / 3-1 / 1-3	B	103	1
3 104 68	6 x 3,4 o 5 kW	-	1-1 / 3-3 / 3-1 / 1-3	A	85	2
3 104 69	6 x 5 kW	12	3-3	B	106	2
3 104 71	6 x 6,7 kW	-	3-3	A	82	2
3 104 72	9 x 6,7 kW	-	3-3	A	91	3
3 104 73	12 x 6,7 kW	-	3-3	B	120	4

Additional battery cabinets for long-life 94 Ah batteries (empty)	
Description	
3 108 12	Battery cabinet (20 x 94Ah - WxLxD 1635x600x800 mm)

Battery kit 94 Ah	
Description	
3 109 23	kit of 20 batteries 94Ah

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

TRIMOD HE

Double conversion VFI three-phase modular UPS

Characteristics

General specifications	3 103 96 3 103 97 3 104 65	3 104 03 3 104 08	3 104 09 3 104 14 3 104 66 3 104 67	3 104 15* 3 104 18* 3 104 68 3 104 69	3 104 19 3 104 71	3 104 20 3 104 72	3 104 73
Nominal power (kVA)	10	15	20	30	40	60	80
Active power (kW)	10	15	20	30	40	60	80
Module power (kW)	3,4	5	6,7	5	6,7	6,7	6,7
Classification	On-Line double conversion VFI-SS-111						
System	Modular, expandable and redundant UPS system						
Input specifications							
Input voltage	380, 400, 415 3PH+N+PE (or 220, 230, 240 1PH)			380, 400, 415 3PH+N+PE			
Input frequency	45-65 Hz (43,0 ÷ 68.4 Hz)						
Input voltage range	400V +15%/-20% - 230V +15%/-20%			400V +15%/-20%			
THD input current	< 3% (at full load)						
Compatibility with power supply units	Si						
Input power factor	> 0,99						
Output Specifications							
Output voltage	380, 400, 415 3F+N+PE (o 220, 230, 240 1F)			380, 400, 415 3F+N+PE			
Efficiency	Up to 96%						
Efficiency in Eco mode	99%						
Nominal output frequency	50/60 Hz selectable by the user ±2 % (standard), ±14 % (extended)						
Crest factor	3:1						
Waveform	Sinusoidal						
Output voltage tolerance	±1%						
THD output voltage	<1%						
Overload capacity	10 minutes at 115%, 60 seconds at 135%						
Bypass	Automatic bypass (static and electromechanical) and manual maintenance bypass						
Batteries							
Battery module	Plug & play						
Battery series type/voltage	VRLA - AGM / 240 Vdc						
Backup time	Configurable						
Battery charger	Smart charge technology. 3-stage advanced cycle						
Batteries separate configuration	no	yes				yes with kit	
Communication and management							
Display and signals	4 x 20-character lines, 4 menu navigation buttons, LED multi-colour status indicator, alarms and audio signals						
Communication ports	2 RS232 serial ports, 1 logical gate, 5 ports with dry contacts, 1 slot for interfaces						
Backfeed protection	NC/NO auxiliary contact						
Emergency Power Off (EPO)	Yes						
Remote management	Available						
Mechanical characteristics							
Height (A-B)	1650 - 1370		1650 - 1370	1370	1370	1650	
Width	414		414	414	414	414	
Depth	628		628	628	628	628	
Installed power modules	3		6	6	9	12	
Installable battery drawers (A-B)	Up to 16 - Up to 12		Up to 12 - 0	-	-	-	
Net weight kg (A-B)	155 - 120		181 - 146	146	165	-	
Ambient Conditions							
Operating temperature/humidity	0 - 40°C / 0 - 95% non condensing						
Protection rating	IP21						
Maximum audible noise at 1 m from the unit (dBA)	58-62						
Certifications							
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3						

* Standard configurations with 3-3 distribution (multi IN/OUT conf available on request)

TRIMOD HE

Long Backup time table



modular battery cabinet
up to 20 battery drawers installable
(100 batteries)



not modular battery cabinet
up to 21 batteries installable*

TRIMOD HE	cabinet type	Power (kW)	Backup time (min)	Dimensions A x L x P (mm)	Weight (kg)
3 104 43 + 3 107 58	modular	10	68	1370 x 414 x 628 + 1650 x 414 x 628	527
3 104 46 + 3 107 60	modular	15	33	2 x 1370 x 414 x 628	413
3 104 46 + 3 108 08	not modular	15	110 *	1370 x 414 x 628 + 1635 x 600 x 800	865
3 104 46 + 3 107 63	modular	15	57	2 x 1370 x 414 x 628	550
3 104 48 + 3 107 62	modular	20	35	2 x 1370 x 414 x 628	572
3 104 14 + 3 108 08	not modular	20	82 *	1370 x 414 x 628 + 1635 x 600 x 800	865
3 104 18 + 3 107 63	modular	30	12	2 x 1370 x 414 x 628	434
3 104 18 + 3 108 09	not modular	30	50 *	1370 x 414 x 628 + 1635 x 600 x 800	890
3 104 18 + 2 x 3 108 09	not modular	30	110 *	1370 x 414 x 628 + 2 x 1635 x 600 x 800	1645
3 104 19 + 2 x 3 107 58	modular	40	16	3 x 1370 x 414 x 628	801
3 104 19 + 3 108 10	not modular	40	33 *	1370 x 414 x 628 + 1635 x 600 x 800	925
3 104 19 + 2 x 3 108 10	not modular	40	82 *	1370 x 414 x 628 + 2 x 1635 x 600 x 800	1700
3 104 19 + 3 x 3 108 10	not modular	40	120 *	1370 x 414 x 628 + 3 x 1635 x 600 x 800	2430
3 104 19 + 3 x 3 107 59	modular	40	38	1370 x 414 x 628 + 3 x 1650 x 414 x 628	439
3 104 19 + 4 x 3 107 64	modular	40	60	1370 x 414 x 628 + 4 x 1650 x 414 x 628	1663
3 104 20 + 2 x 3 107 64	modular	60	15	1370 x 414 x 628 + 2 x 1650 x 414 x 628	942
3 104 20 + 4 x 3 107 63	modular	60	27	5 x 1370 x 414 x 628	1579
3 104 20 + 3 108 11	not modular	60	17 *	1370 x 414 x 628 + 1635 x 600 x 800	952
3 104 20 + 2 x 3 108 11	not modular	60	50 *	1370 x 414 x 628 + 2 x 1635 x 600 x 800	1715
3 104 20 + 3 x 3 108 11	not modular	60	80 *	1370 x 414 x 628 + 3 x 1635 x 600 x 800	2474
3 104 20 + 4 x 3 108 11	not modular	60	110 *	1370 x 414 x 628 + 4 x 1635 x 600 x 800	3234

* Configurations with battery cabinet (20 x 94 Ah).
Dimensions and weight: A x L x P 1635 x 600 x 800 (mm), 785 kg

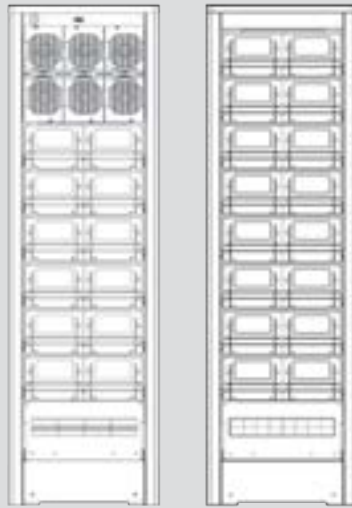
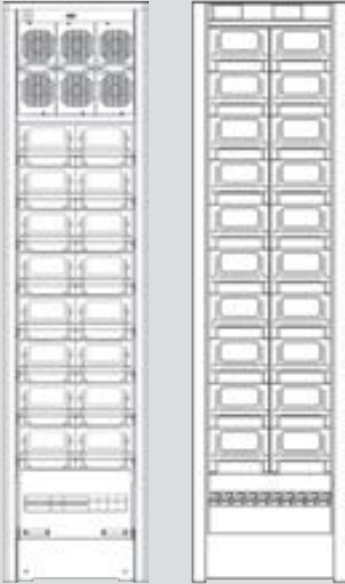
NOTE: The stated Backup times in minutes are estimated and may vary according to the load characteristics, operating conditions and environment.

TRIMOD HE

Examples of configuration

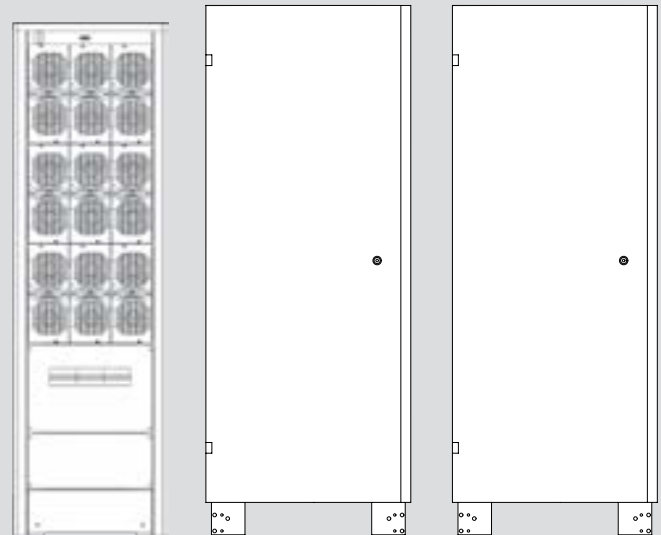
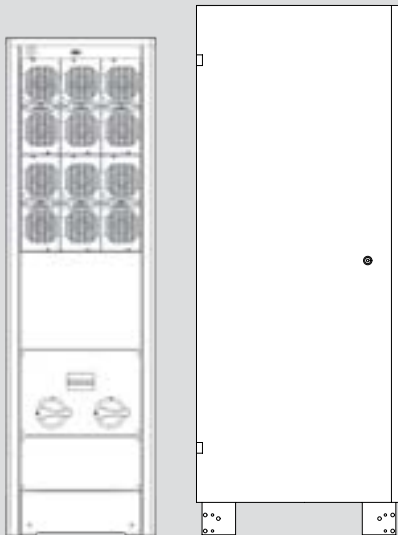
TRIMOD HE 10 kW
 2 modular cabinets
 Backup time 68 min
 Weight 527 kg

TRIMOD HE 15 kW
 2 modular cabinets
 Backup time 57 min
 Weight 550 kg



TRIMOD HE 30 kW
 1 modular cabinet, 1 not modular cabinet **(20 x 94 Ah)**
 Backup time 50 min
 Weight 890 kg

TRIMOD HE 60 kW
 1 modular cabinet, 2 not modular cabinets **(20 x 94 Ah)**
 Backup time 50 min
 Weight 1715 kg



ARCHIMOD HE

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



3 103 61



3 108 55



3 108 73

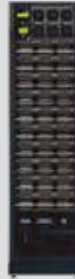
ARCHIMOD HE

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

Configurations

20

Power: 20 kVA
Backup time: 65 min
1 Cabinet
1 Control module
3 Power modules
30 Battery drawers
1 Distribution module



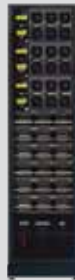
40

Power: 40 kVA
Backup time: 21 min
1 Cabinet
2 Control modules
6 Power modules
24 Battery drawers
1 Distribution module



60

Power: 60 kVA
Backup time: 8 min
1 Cabinet
3 Control modules
9 Power modules
18 Battery drawers
1 Distribution module



80

Power: 80 kVA
Backup time: 14 min
2 Cabinets
4 Control modules
12 Power modules
36 Battery drawers
1 Distribution module



100

Power: 100 kVA
Backup time: 10 min
2 Cabinets
3 Control modules
2 Power expansion modules
15 Power modules
36 Battery drawers
1 Distribution module



120

Power: 120 kVA
Backup time: 8 min
2 Cabinets
3 Control modules
3 Power expansion modules
18 Power modules
36 Battery drawers
1 Distribution module



Cat. Nos. Configurable cabinets

Cat. Nos.	Nominal power (kVA)	Number of battery modules	Number of control modules	Number of phases
3 104 59	20	30	1	1-1/3-3/3-1/1-3
3 104 60	40	24	2	1-1/3-3/3-1/1-3
3 104 61	60	18	3	3-3
3 104 62	80	-	4	3-3
3 104 63	100	-	3	3-3
3 104 64	120	-	3	3-3

Additional cabinets for batteries

Description

3 108 18	Empty modular battery cabinet
3 107 17	Empty Battery cabinet for long life batteries (21 x 94Ah - WxLxD 1635x600x800 mm)

Accessories

Description

3 108 73	6.7 kVA power module
3 108 76	kit of 3 x long life battery trays
3 108 64	Front/rear door
3 108 55	Kit of 3 x 9 Ah battery drawers
3 108 56	Kit of 3 empty battery drawers
3 108 51	Additional charger module
3 108 65	Cover for empty battery slot
3 108 66*	3 Cover for empty power module slot

* always be used when there are empty slots

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

ARCHIMOD HE

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

Characteristics						
General characteristics						
	3 104 59	3 104 60	3 104 61	3 104 62	3 104 63	3 104 64
Nominal power (kVA)	20	40	60	80	100	120
Active power (kW)	20	40	60	80	100	120
Module power (kVA)	6.7 per power module (20 kVA with 3 modules), $\cos\phi$ 1					
Technology	On-line double conversion VFI-SS-111					
System	Modular, expandable and redundant system in a single cabinet, 19" rack					
Hot Swap capacity	The power and/or battery modules can be replaced without switching off the UPS					
Input characteristics						
Input voltage	380, 400, 415 3F+N+PE (o 220, 230, 240 1F)		380, 400, 415 3F+N+PE			
Input frequency	45-65 Hz \pm 2% Autosensing					
Input voltage range	230 V + 15%/-20% 1P 400 V + 15 %/-20% 3P		400 V +15%/-20% 3P			
THD of input current	< 3%					
Compatibility with gensets	Configurable for synchronisation between the input and output frequencies, even for the highest frequency ranges, \pm 14%					
Input power factor	> 0,99					
Output characteristics						
Output voltage	380, 400, 415 3F+N+PE (o 220, 230, 240 1F)		380, 400, 415 3F+N+PE			
Efficiency	Up to 96%					
Nominal output frequency	50/60 Hz \pm 0.1					
Peak factor	3.5:1					
Tolerance on output voltage	\pm 1%					
Overload capacity	10 minutes at 113% and 60 seconds at 135%					
Efficiency in Eco mode	99%					
Bypass	Automatic and maintenance bypass					
Batteries						
Battery modules	The battery modules are designed for easy insertion in the cabinet. No special operation is required to connect them					
Battery range type/voltage	VRLA - AGM / 252 Vdc					
Backup time	Configurable and extendable, both internally and with additional battery cabinets					
Battery charging	Smart Charge technology 3-step advanced cycle					
Communication and management						
Screen and signalling	4 x 20-character lines, 4 menu navigation buttons, multi-coloured LED status indicator					
Communication ports	For each control module: 2 x RS232 serial ports, 1 logic level port, 5 volt-free contact ports, 2 slots for SNMP interfaces (optional)					
Back-feed protection	N/C + N/O auxiliary contact					
Emergency stop	Yes					
Remote control	Available					
Mechanical characteristics						
Dimensions (H x W x D) (mm)	2080 x 570 x 912 (42U)					
Installable power modules	3	6	9	12	15	18
Installable battery modules	Up to 30	Up to 24	Up to 18	-	-	-
Net weight (kg)	205	240	276	272	318	364
Ambient conditions						
Operating temperature/humidity	0 - 40 °C / 0 - 95% non condensing					
Protection index	IP21					
Maximum noise audible at 1 m (dBA)	50 \div 65					
Certifications						
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3					

Keor MOD

UPS Modular three-phase double conversion VFI



3 104 80

Articles **UPS - empty power cabinets**

Articles	Power (kW)	Installable battery drawers	Distribution	Weight (kg)
3 104 80	25 - 125	from 2 to 5 battery drawers	3-3	
3 104 81	25 - 250	-	3-3	

Accessories

Description

3 106 75	25 kW power module
3 106 76	Empty battery blocks kit for 6 batteries (to be used in sets of 4 per drawer)
3 106 77	Kit of 2 EMPTY battery drawers
3 106 78	Kit of 4 battery blocks (6 x 9 Ah batteries)
3 106 79	Kit of 4 battery blocks (6 x 11 Ah batteries)
3 109 62	Kit of 4 battery blocks (6 x 9Ah Long Life batteries)

Codes in red **new products**.

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

Keor MOD

UPS Modular three-phase double conversion VFI

Configuration examples

UPS up to 125A

25

Power: 25 kW
Backup time: 48 min. when 100% charged
1 Power module
10 Battery drawers



UPS up to 250A

50

Power: 50 kW
2 Power modules



75

Power: 75 kW
Autonomy: 11 min. when 100% charged
3 Power modules
10 Battery drawers



100

Power: 100 kW
4 Power modules



125

Power: 125 kW
Autonomy: 5.2 min. when 100% charged
5 Power modules
10 Battery drawers



250

Power: 250 kW
10 Power modules



Keor MOD

UPS Modular three-phase double conversion VFI

Characteristics										
General specifications										
Nominal power (kVA)	25	50	75	100	125	150	175	200	225	250
Active power (kW)	25	50	75	100	125	150	175	200	225	250
Module power (kW)	25									
Classification	On-Line double conversion VFI-SS-111									
No. Power modules	1	2	3	4	5	6	7	8	9	10
System	Modular, expandable and redundant UPS system									
Input specifications										
Input voltage	400V 3F+N+PE									
Input frequency	45-65 Hz (43.0 ÷ 68.4 Hz)									
Input voltage range	400V +15%/-20% - 230V +15%/-20%									
THD input current	< 3% (at full load)									
Compatibility with power supply units	Yes									
Input power factor	> 0.99									
Output Specifications										
Output voltage	380, 400, 415V									
Efficiency (power module)	Up to 96.8%									
System efficiency	Up to 96.5%									
Efficiency in Eco mode	99%									
Nominal output frequency	50/60 Hz selectable by the user ±2 % (standard), ±14 % (extended)									
Crest factor	3:1									
Waveform	Sinusoidal									
Output voltage tolerance	±1%									
THD output voltage	<0.5% with linear load, <1% with non-linear load									
Overload capacity	10 minutes at 125%, 60 seconds at 150%									
Bypass	Automatic bypass (static and electromechanical) and manual maintenance bypass									
Batteries										
Battery module	Plug & play									
Battery series type/voltage	VRLA - AGM 12 V, 9 Ah - 11 Ah									
Autonomy	Configurable									
Battery charger	Smart charge technology. 3-stage advanced cycle									
Independent battery configuration	Yes, maximum 5 sets of independent batteries (configurable as common or separate units)									
Communication and management										
Display	10-inch rotating colour touch screen									
Communication ports	2 x RS485 ports (one for external accessories), 11 input floating contacts, 8 output floating contacts, 1 interface slot, USB host port									
Back feed protection	NC/NO auxiliary contact									
Emergency Power Off (EPO)	Yes									
Cold start push-button	Yes									
Remote management	Available									
Mechanical characteristics										
Height (mm)	1990									
Width (mm)	600									
Depth (mm)	970									
Installable power modules	Up to 5					Up to 10				
Installable battery drawers	Up to 10					—				
Net weight kg										
Ambient Conditions										
Operating temperature/humidity	0 - 40°C / 0 - 95% non condensing									
Protection rating	IP20									
Maximum audible noise at 1 m from the unit (dBA)	50-65									
Conformity										
Certifications	EN 62040-1, EN 62040-2, EN 62040-3									
Services:										
Installation	Modular architecture with "plug & play" power modules and batteries									
Maintenance	Availability of optional services provided by the manufacturer									
Ease of management	Advanced diagnostic functions via the touch screen display									

ARCHIMOD HE 240/480

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



3 104 75

3 108 73

Cat. Nos.

Empty preconfigured cabinets

The cabinets are supplied empty and are preconfigured for the power and capacity indicated in the table

Cat. Nos.	Nominal power kW	Number of Installable power modules	Number of phases
3 104 75	240	36	3-3
310476 + 310477*	480	72	3-3

* ordered both

Communication accessories

Description

3 109 30	PROFESSIONAL network interface, internal version (card)
3 109 31	STANDARD network interface, internal version (card)
3 109 35	INDUSTRIAL network interface, internal version (card)

Accessories

Description

3 108 73	6.7 kW power module
3 108 51	Additional charger module
0 205 82	Set of 4 lifting rings
3 108 66*	3 covers for empty power module slot

* always be used when there are empty slots

Examples of configuration

ARCHIMOD HE160
Power: 160 kW scalable up to 240
1 Distribution cabinet
24 Power modules
4 covers for empty power module slot



ARCHIMOD HE240
Power: 240 kW
1 Distribution cabinet
36 Power modules



ARCHIMOD HE320
Power: 320 kW
scalable up to 480
1 Distribution cabinet
48 Power modules
6 covers for empty power module slot



ARCHIMOD HE480
Power: 480 kW
1 Cabinet
72 Power modules
1 Distribution cabinet



ARCHIMOD HE 240/480

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

Characteristics

General characteristics	3 104 75	310476 + 310477
Nominal power (kW)	240	480
Module power (kW)	6.7 per power module (20 kW with 3 modules), $\cos\phi$ 1	
Technology	On-line double conversion VFI-SS-111	
System	Modular, expandable and redundant system in a single cabinet	
Input characteristics		
Input voltage	380, 400, 415 3PH+N+PE	
Input frequency	45-65 Hz (autosensing)	
Input voltage range	+ 15%/- 20%	
THD of input current	< 3%	
Compatibility with gensets	Configurable for synchronisation between the input and output frequencies, even for the highest frequency ranges, \pm 14%	
Input power factor	> 0.99	
Output Specifications		
Output voltage	380, 400, 415 3PH+N+PE	
Efficiency	Up to 96%	
Nominal output frequency	50/60 Hz	
Peak factor	3.5:1	
Tolerance on output voltage	\pm 1%	
Permitted overload	10 minutes at 115% and 60 seconds at 135%	
Efficiency in Eco mode	99%	
Bypass	Static, electromechanical and maintenance bypass	
Batteries		
Battery range type/voltage	VRLA - AGM/252 VDC	
Backup time	Configurable and extendable, with additional battery cabinets	
Battery charging	Smart Charge technology 3-step advanced cycle	
Communication and management		
Screen and signalling	For each control drawer, 1 display with 4 x 20-character lines, 4 menu navigation buttons, multi-coloured LED status indicator	
Communication ports	2x RS232 communications port, 2x 5 volt-free contacts 2x logic level port, N.2 SNMP slot	
Back-feed protection	N/C + N/O auxiliary contact	
Emergency stop	Yes	
Mechanical characteristics		
Dimensions (W x H x D) (mm)	1350 x 2050 x 750	820 x 2050 x 750 + 1650 x 2050 x 750
Installable power modules	up to 36	up to 72
Installable battery modules	-	-
Net weight (kg) *	440	256 + 610
Ambient conditions		
Operating temperature/humidity	0 - 40°C / 0 - 95% non condensing	
Protection index	IP 21	
Maximum noise audible at 1 m (dBA)	<80	
Certifications		
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3	

BATTERY CABINET

FOR ALL THREE-PHASE UPS



310657 up to 20 batteries 105 Ah



310659 up to 62 batteries 41 Ah



310982 up to 62 batteries 105 Ah

Universal battery cabinets for all three-phase Legrand UPS from 10kVA up to 800kVA power range.

The Battery cabinet is designed to house standard VRLA Batteries of capacity range from 24Ah to 105Ah (C10).

The battery cabinets are available in 5 different mechanical dimensions, are able to contain various combination of Batteries, up to maximum 63 blocks, connected in series and parallel, with positive, negative and middle point poles and with max DC voltage of 800Vdc.

Battery cabinet

For all three-phase UPS



Cat. Nos.	EMPTY BATTERY CABINET*					UPS Compatibility
	Cabinet Dimensions (mm)	TOT Weight (kg)	Indicative Battery Capacity (Ah)	Standard No. Of Blocks		
310625	800x900x1420	213	24	20		Trimod HE
310626	800x900x1420	213	24	60		Keor T
310627	800x900x1420	214	24	40		Trimod HE
310628	800x900x1420	213	24	60		Trimod HE
310629	800x900x1420	213	41	20		Trimod HE
310654	800x900x1420	214	41	40		Trimod HE
310655	800x900x1420	213	55	20		Trimod HE
310656	800x900x1420	215	70-93	20		Trimod HE
310657	800x900x1420	215	105	20		Trimod HE
310658	800x900x1900	253	24	21		Archimod HE
310659	800x900x1900	253	24	60-62		Keor HPE
310670	800x900x1900	254	24	42		Archimod HE
310671	800x900x1900	253	24	63		Archimod HE
310672	800x900x1900	253	41	21		Archimod HE
310673	800x900x1900	253	41	60-62		Keor HPE / Keor T
310674	800x900x1900	254	41	42		Archimod HE
310939	800x900x1900	253	41	60		Trimod HE
310940	800x900x1900	253	55	21		Archimod HE
310941	800x900x1900	254	55	42		Archimod/Trimod HE
310942	800x900x1900	255	70-93	21		Archimod HE
310943	800x900x1900	255	105	21		Archimod HE
310944	1200x900x1900	333	55	60-62		Keor HPE / Keor T
310945	1200x900x1900	333	55	60		Trimod HE
310965	1200x900x1900	335	70-93	50-52		Keor HP
310966	1200x900x1900	336	70-93	40-42		Archimod/Trimod HE
310967	1200x900x1900	335	105	50-52		Keor HP
310968	1200x900x1900	336	105	42		Archimod/Trimod HE
310980	1400x900x1900	385	70-93	60-62		Keor HPE / Keor T
310981	1400x900x1900	385	70-93	60		Trimod HE
310982	1400x900x1900	385	105	60-62		Keor HPE / Keor T
310983	1400x900x1900	385	105	60		Trimod HE
310984	1400x900x2080	415	105	21		Archimod HE 240/480
310985	1400x900x2080	416	105	42		Archimod HE 240/480
310986	1400x900x2080	415	105	63		Archimod HE 240/480

* in the cabinet are included Fuse Holder Switch and Fuses, Batteries not included

Battery cabinet

For all three-phase UPS

Characteristics

General characteristics	
Nominal Voltage	800 Vdc
Battery segregation	Internal panel in Polycarbonate
Switches and protection access	Internal bottom front side
Disconnection and protection devices *	Fuse Holders Switch with NH fast fuses (sized accordingly with Battery Power)
Fuse holder Open/Close signal*	Auxiliary Micro Switch
Cable Entrance	bottom sides (both left and right)
Cable connections	On Fuse holder terminals
Max Cable side entrance	3x 150mm ²
Cabinet Access	Front door with key lock and removable sides and rear panels
Shelter Bent Metal Sheet Thickness	20/10
Shelves Bent Metal Sheet Thickness	30/10
Protection Degrees	IP20 (Optional IP21)
Colour	RAL 7016
Standard	IEC-EN 62040-1

On its own, a UPS is unable to guarantee total protection of the data processing systems it powers. This is due to several factors, amongst which:

- Unexpected load connections, such as stoves and vacuum cleaners, can cause overloads which annul the protection provided by the UPS.
- Installation in unmanned areas such as EDP rooms and basements or round-the-clock operations can make alarm reception difficult or impossible. This consequently put critical equipment at risk.

Moreover, since the systems can be extremely costly to repair, also owing to the time relevant downtime, it is easy to understand the importance to equip a UPS with a supervision system able to inform the user of the imminent danger and automatically proceed with a series of actions to protect the data and the operating systems. Legrand offers 2 solutions for the UPS supervision according to the type of installation and the management method: software solution and hardware solution.

COMMUNICATION ACCESSORIES

UPS SUPERVISION SYSTEM



CHARACTERISTICS OF THE RANGE

Network interfaces, for remote control of UPS.

Sensors for monitoring the ambient temperature and humidity.

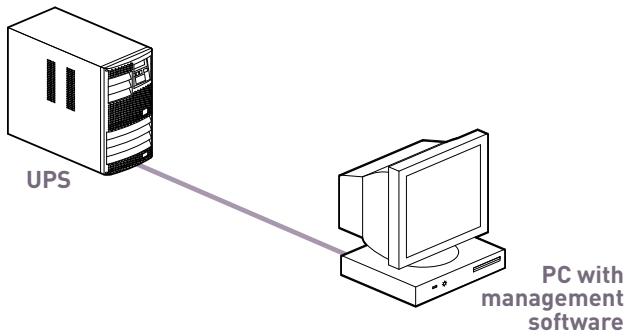
Communication and supervision software for accessing the operating parameters of the UPS, carrying out full diagnostics and configuring specific functions.

SELECTION GUIDE

The UPS Management solutions

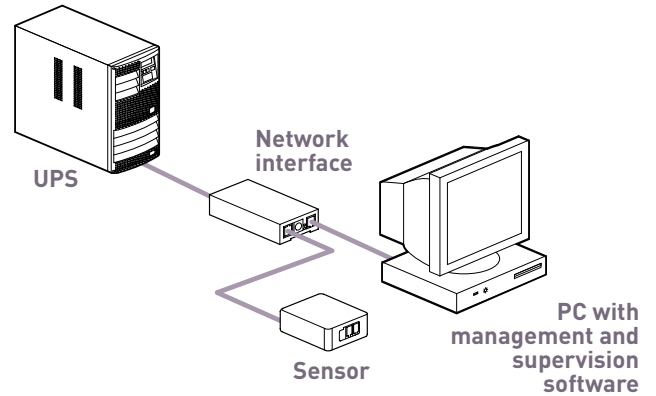
“Software” solution

The Management is performed by the software installed on the PC or server to protect. This solution is recommended for small installations where the UPS is installed close to PC or server.

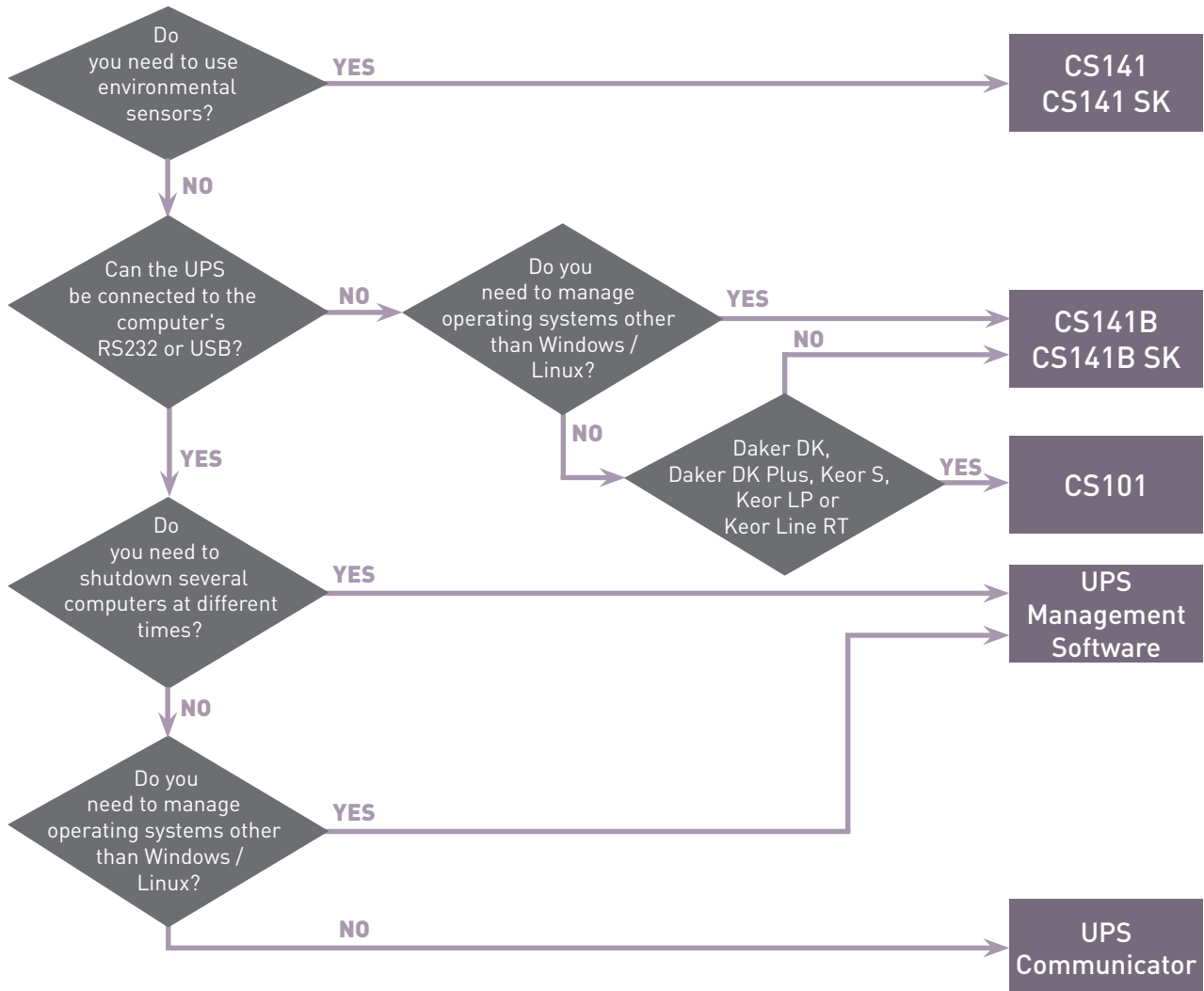


“Hardware + software” solution

The System is made by a set of communication accessories and software allowing to perform more extended supervision, direct or remotely by INTERNET.



The following diagram shows how is possible to choose the best configuration for your needs:



ACCESSORIES

Network interfaces



Cat. Nos. **CS141 Network interface**

The network interfaces for managing UPS do not require any external software. They include a proprietary system capable of real-time control of the operation of the UPS and managing numerous events (power failure, overload, bypass, problem, etc.) and as a result executing a series of actions, such as:

- Memorisation of events in time-stamped log files
- Regular memorisation of the main operating parameters
- Sending e-mails
- Execution of scheduled actions
- Display of pop-up messages, shutdown, and execution of customised ncommands on remote computers
- Stopping and restarting the UPS
- Sending "Wake on LAN (WOL)" signals
- Support of the SNMP protocol
- Sending SNMP trap messages
- Displaying data and configuration via a web browser (Internet Explorer, Mozilla Firefox, Opera, etc.)
- Firmware updatable, which can be downloaded free of charge on the Internet
- Ethernet 10/100 Base-T (half-duplex and full-duplex) connection with auto-recognition function
- DHCP function
- 1 RCCMD licence included

Available in external and internal version (in this case it is inserted in a dedicated slot in the UPS).

Supply voltage 9 - 30 VDC (power supply included in external versions). The professional and industrial versions have an additional RS 232/RS 485 communication ports.

- 3 109 30 CS141 SK PROFESSIONAL network interface, internal version (card)
- 3 109 31 CS141B SK STANDARD network interface, internal version (card)
- 3 109 32 CS141 PROFESSIONAL network interface, external version
- 3 109 33 CS141B STANDARD network interface, external version
- 3 109 34 CS141M INDUSTRIAL network interface, external version
- 3 109 35 CS141M SK INDUSTRIAL network interface, internal version (card)

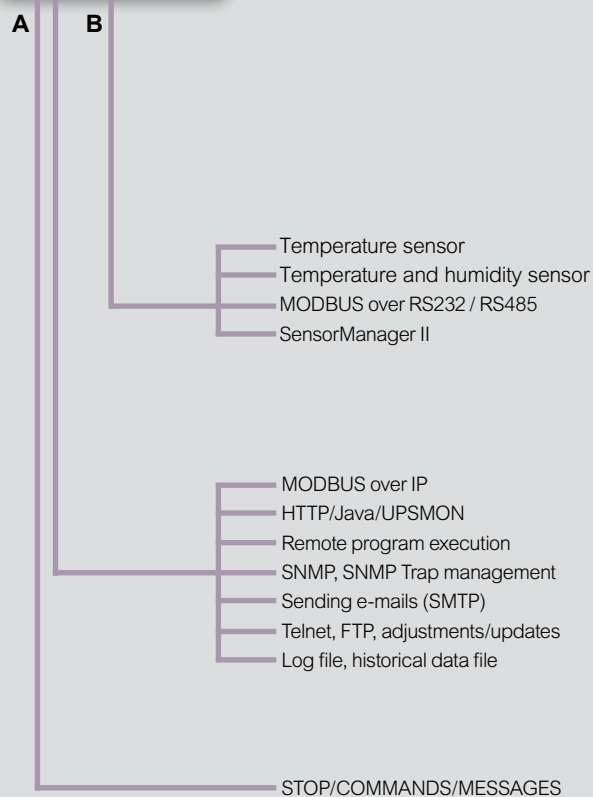
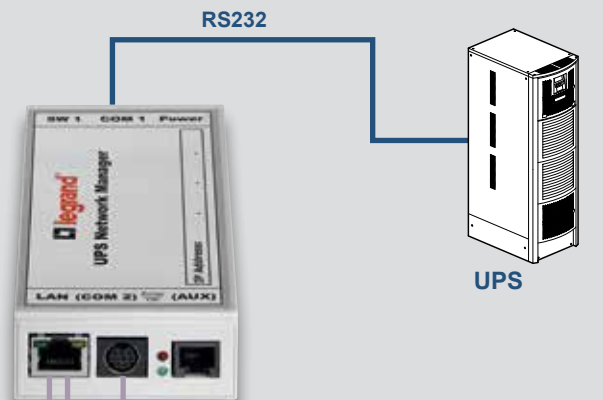
CS101 Network interface

- 3 109 38 CS101 Network interface, internal version (card) for Daker DK, Daker DK Plus, Keor S, Keor LP or Keor Line RT

ACCESSORIES

Network interfaces

■ CS141 Characteristics



- Unix/Linux + RCCMD agent
- Windows + RCCMD agent
- Mac OS X + RCCMD agent
- AS/400 + RCCMD agent
- Novell NetWare + RCCMD agent
- VMware + RCCMD agent
- Citrix + RCCMD agent

Model	A	B
CS141B	X	
CS141B SK	X	
CS141	X	X
CS141 SK	X	X
CS141M	X	X*
CS141M SK	X	X*

* Only Modbus over RS 485

ACCESSORIES

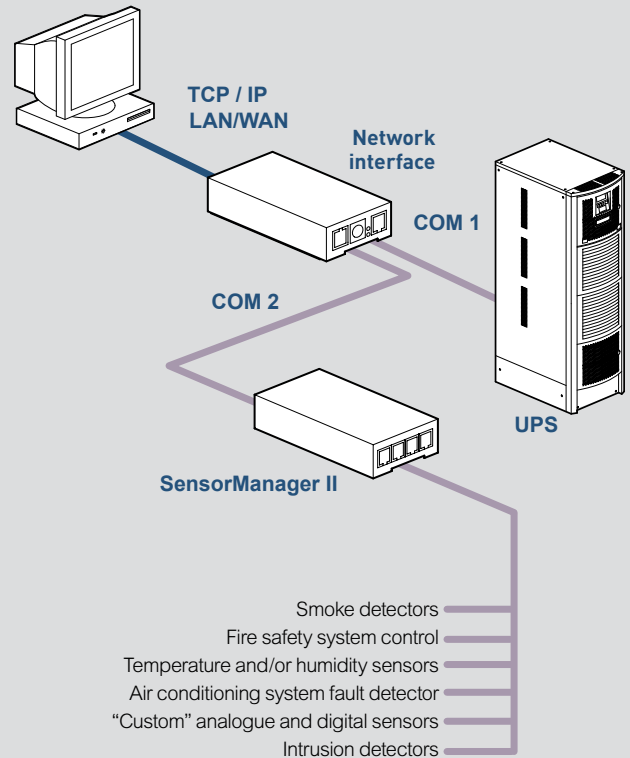
Sensors and other accessories



Cat. Nos.	Sensors
	Description
3 108 97	SM_T_COM Temperature sensor for direct connection to the COM2 port on the CS141 and CS141 SK interfaces SensorManager II. Cannot be used with SensorManager II.
3 108 98	SM_T_H_COM Combined temperature and humidity sensor for direct connection to the COM2 port on the CS141 and CS141 SK interfaces SensorManager II. Cannot be used with SensorManager II.
3 108 99	SensorManager II Manager for sensors: connects to the COM2 port on the CS141 and CS141 SK interfaces and manages up to 8 analogue inputs, 4 digital inputs and 4 digital outputs. The configuration is managed directly by the CS141 interfaces (PROFESSIONAL version), described previously. The "Scale Divisor" and "Off set" configuration functions enable SensorManager to be used with any analogue device (see characteristics). It includes 1 "SM_T" temperature sensor.
3 109 00	SM_T Temperature sensor that can only be used with SensorManager. It enables another "SM_T" sensor to be connected using a special connector.
3 109 01	SM_T_H Combined temperature and humidity sensor that can. Only compatible with SensorManager II.
3 109 02	Door sensor This consists of a reed switch and a magnet. Only compatible with SensorManager II.
3 109 03	SM_flash Flashing illuminated signal. Only compatible with SensorManager II.

ACCESSORIES

Sensors and other accessories



■ SensorManager II technical characteristics

Supply voltage (VDC)	9-24
Temperature (°C)	0 ÷ 65
Non-condensing humidity (%)	10 ÷ 80
Analogue inputs (V)	0 ÷ 10
Digital inputs (V)	9 ÷ 24
100 mA digital outputs (V)	9 ÷ 24
Dimensions (WxDxH) (mm)	70 x 130 x 30

■ Sensor technical characteristics

	3 108 97	3 108 98	3 109 00	3 109 01
Supply voltage Vdc	9 to 15*	9 to 15*	15 to 24**	15 to 24**
Temperature range °C	-25 to +100	-25 to +100	0 to +100	0 to +100
Relative humidity ± 5% (%)		0 to 100		0 to 100
Connection cable included (m)	1.8	1.8	5	5
Dimensions H x W x D (mm)	27 x 70 x 70			

* Direct from the network interface
** Direct from SensorManager II

ACCESSORIES

Management software



Cat. Nos.	Software
	Description
downloadable	UPS Communicator Set of applications for real-time control of the operation of the UPS and to ensure the integrity of the systems on the computers supplied by this UPS. Operates with an agent for executing commands on remote computers (RS System).
3 108 79	UPS Management Software Set of applications for real-time control of the operation of the UPS and to ensure the integrity of the systems on the computers supplied by this UPS. Requires the addition of an agent for executing commands on remote computers (RCCMD).
3 108 80	UPS Management Software Set of applications for real-time control of the operation of the UPS and to ensure the integrity of the systems on the computers supplied by this UPS. Requires the addition of an agent for executing commands on remote computers (RCCMD). Includes an RS232/USB converter.
	RCCMD Software enabling a computer to receive and execute, using the TCP/IP protocol, all the remote commands sent by the management systems of the UPS. An RCCMD licence is necessary for each computer to be controlled. Only the licences are supplied: the software can be downloaded on the Internet (after requesting the activation code).
3 108 85	RCCMD Multi-OS RCCMD licence
3 108 86	RCCMD Pack of multi-OS RCCMD licences
3 108 87	RCCMD Pack of 10 multi-OS RCCMD licences
3 108 88	RCCMD Pack of 25 multi-OS RCCMD licences
3 108 89	RCCMD Pack of 50 multi-OS RCCMD licences
3 108 90	RCCMD RCCMD licence for AS/400 (minimum release: V5R3M0)
	UNMS "WEB based" application capable of real-time supervision of the status of all UPS, via the management systems of the UPS and the TCP/IP protocol.
3 108 91	UNMS Licence for 25 UPS
3 108 92	UNMS Licence for 50 UPS
3 108 93	UNMS Licence for 150 UPS

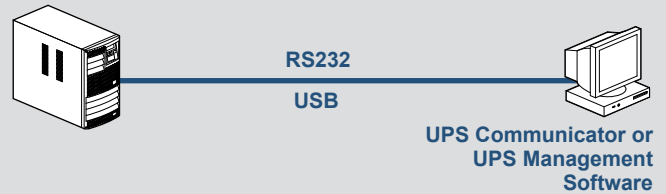
ACCESSORIES

Management software

Examples of types of management and communication that can be created with software and hardware.

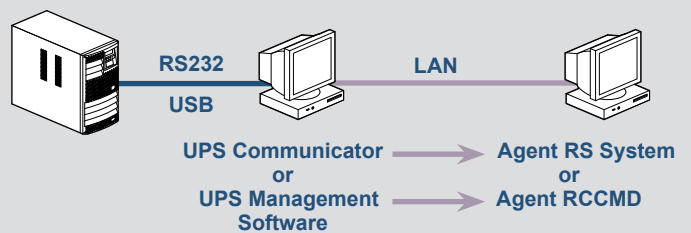
Local protection

Protects and controls a single station (PC or server) which must be located less than 12 metres away.



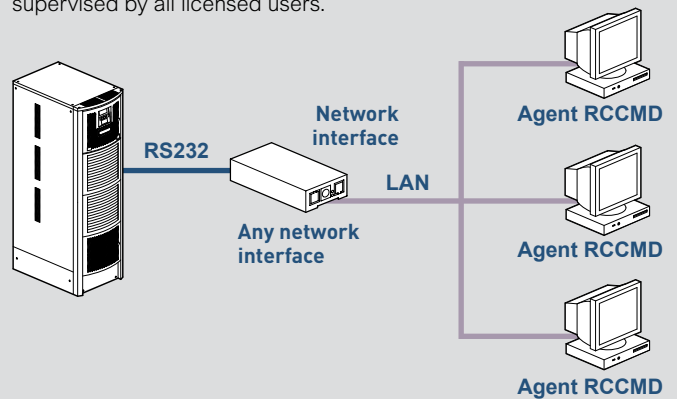
Extended local protection

Protects a larger number of stations (PC or server) but they are all controlled by the station directly connected to the UPS.



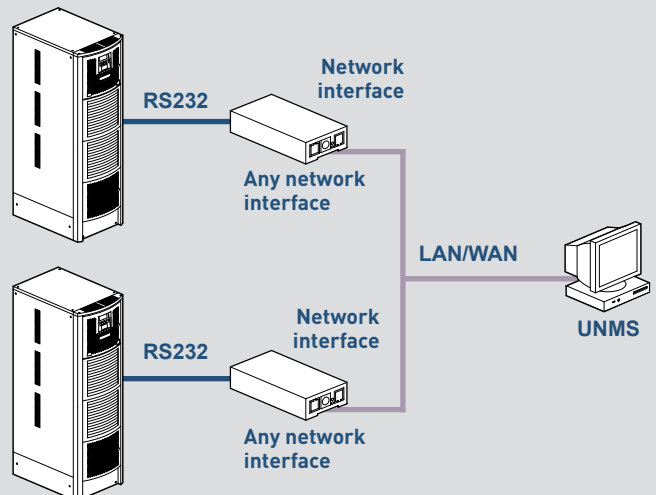
Protection via TCP/IP network

Enables control of all the stations that can communicate with the network interface. The management of the system can be supervised by all licensed users.



Centralised protection

Using the UNMS supervision software, it is possible to control all the UPS connected to a TCP/IP network.





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.



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