Keor DK

SINGLE PHASE UPS
from 1 to 20 kVA

GLOBAL SPECIALIST IN ELECTRICAL
AND DIGITAL BUILDING INFRASTRUCTURES

legrand®

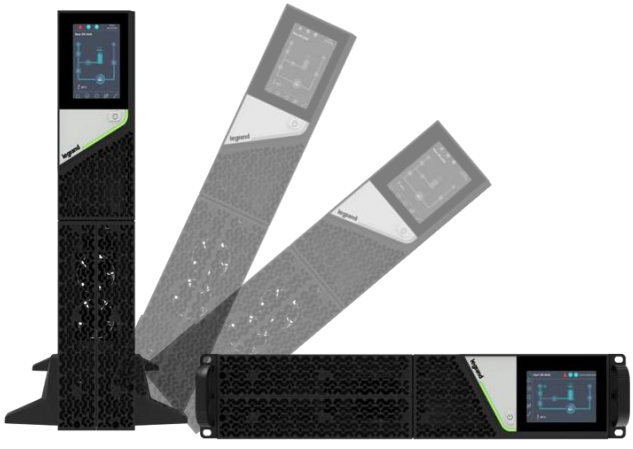
Keor DK

1PH CONVENTIONAL UPS SYSTEM

Keor DK is a single phase uninterruptible power supply UPS with high frequency PWM tecnology, online double conversion.

It delivers a rated power from 1 to 20 kVA with VRLA and lithium batteries, designed for critical application.

- **Convertible Rack/Tower**
  1-10 kVA 1-1ph



- **Rack 19inch**
  10-20 kVA 3-1, 3-3, 1-1ph

Energy saving

Unity power factor (KVA=KW) guarantees maximum real power. Keor DK achieves peak efficiency of 96% thanks to advanced AC-AC technology, reducing operational costs and environmental impact

Touch screen LCD

Easy-to-use control panel with Intuitive Led status bar and interactive icons for quick navigation. Built-in gravity sensor for automatic screen rotation based on UPS orientation.

Easy maintenance

Easy UPS and battery cabinet set-up and maintenance with hot-swappable battery block. The battery drawer can be easily extracted from the front of the UPS without load interruption

Li-ion batteries

Keor DK offers compatibility with both standard VRLA and lithium batteries, adapting to a wide range of needs in terms of runtime, lifespan and TCO. Is also possible to extend the battery runtime for business continuity applications using additional battery cabinets.

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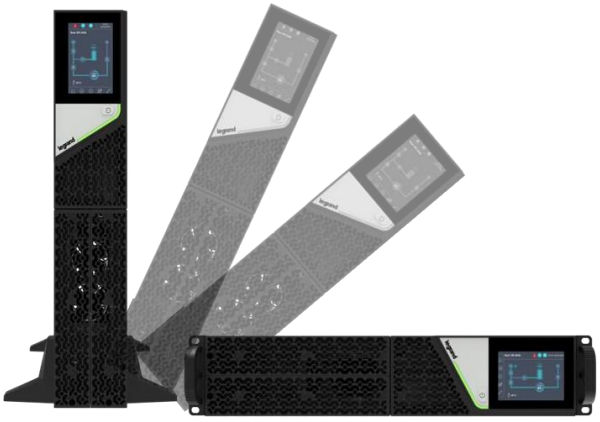
Convertible Rack/Tower 1-10 KVA

Features



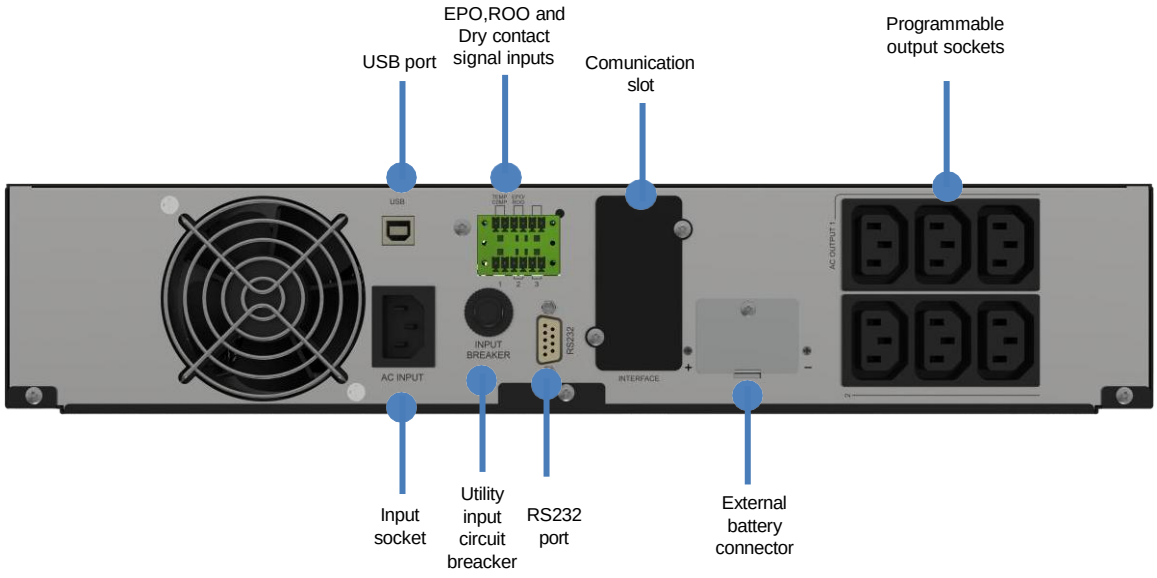
- Output power factor 1, KVA = KW
- Touch screen display with gravity sensor
- AC/AC efficiency up to 96%
- ECO Mode efficiency up to 98%
- 1-10kVA 2U design
- Parallel capability (≥5kVA)
- Lithium ready
- Lower dept solution for 600mm dept rack cabinet
- High internal charger solution up to 8A to achieve longer runtimes
- EPO, ROO, relay contact embedded
- Genset compatible

Convertible 1ph UPS

On-Line double conversion UPS that can be used in both tower and rack 19" configurations. It delivers a rated power up to 10kVA equipped with VRLA or lithium batteries, contained in a specific compartment inside the UPS or in one or more external cabinets

Performance and Availability

Keor DK offers best-in-class efficiency of up to 96% across a wide range of load conditions, resulting in significant OPEX coast saving. With Advanced Eco Mode function, it provides a superlative efficiency of up to 98%.



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Rack 10-20 KVA

Features

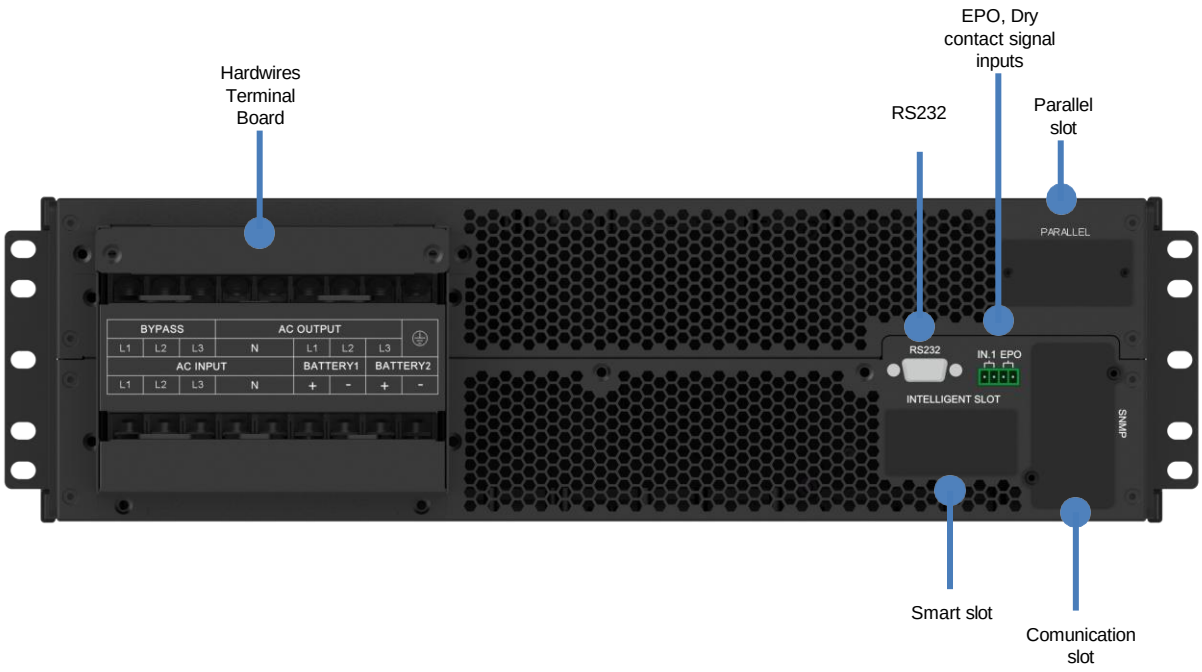
- Output power factor1, KVA = KW
- Touch screen display 4.3inch
- 3-1, 3-3, 1-1 mode
- AC/AC efficiency up to 96%
- Wide input voltage range -60% ~ +25%
- Parallel capability
- Lithium ready
- Genset compatible
- Anti-corrosion resistant coating
- External UPS input and output distribution box with backfeed contactor

Rack UPS system

On-Line double conversion UPS that can be used in 19inch rack configuration. It delivers a rated power of 10-15-20kVA equipped with VRLA or lithium batteries, contained in external cabinet.

Versatile connection

UPS Input and output wiring can be connected as 3 phase or 1 phase according to load demands.
In addition, utility input and bypass input can be connected as single source or dual source.



Keor DK

UPS - On-line double conversion VFI

3 113 40

3 113 53

General Features

- Power factor correction PFC (input PF>0.99)
- Easy-to-use touch screen display up to 4.3”
- Wide range of input voltages and frequencies
- Cold start
- Built-in backfeed protection
- Intelligent communication ports and SNMP management capability
- Parallel operation of up to 4 units
- Battery integrated for standard autonomy

Convertible UPS with internal batteries

German Standard input Plug

	Nominal power (VA)	Active power (W)	Bakup time (min)
3 113 40	1000	1000	9
3 113 41	2000	2000	10
3 113 42	3000	3000	7

Convertible UPS for 600 mm depth rack cabi net

German Standard input Plug

	Nominal power (VA)	Active power (W)	Bakup time (min)
3 113 43	2000	2000	10
3 113 44	3000	3000	7

Convertible UPS with 8A charger w/o battery

German Standard input Plug

	Nominal power (VA)	Active power (W)	Bakup time (min)
3 113 45	1000	1000	-
3 113 46	2000	2000	-
3 113 47	3000	3000	-

Convertible UPS with internal batteries

Hard-wired

	Nominal power (VA)	Active power (W)	Bakup time (min)
3 113 48	5000	5000	6
3 113 49	6000	6000	5

Convertible UPS without internal batteries

Hard-wired

	Nominal power (VA)	Active power (W)	Phase configuration
3 113 50	5000	5000	1/1
3 113 51	6000	6000	1/1
3 113 52	10000	10000	1/1

Rack UPS without batteries

Hard-wired

	Nominal power (VA)	Active power (W)	Phase configuration
3 113 53	10000	10000	3-1, 3-3, 1-1
3 113 54	15000	15000	3-1, 3-3, 1-1
3 113 55	20000	20000	3-1, 3-3, 1-1

Convertible UPS with internal batteries

British Standard input Plug

	Nominal power (VA)	Active power (W)	Bakup time (min)
3 113 34	1000	1000	9
3 113 35	2000	2000	10
3 113 36	3000	3000	7

Convertible UPS with 8A charger w/o battery

British Standard input Plug

	Nominal power (VA)	Active power (W)	Bakup time (min)
3 113 37	1000	1000	-
3 113 38	2000	2000	-
3 113 39	3000	3000	-

Battery cabinet (with VRLA batteries)*

	Description
3 113 60	Battery cabinet for 1 kVA
3 113 61	Battery cabinet for 2 kVA
3 113 62	Battery cabinet for 3 kVA
3 113 63	Battery cabinet for 5-6 kVA
3 113 64	Battery cabinet for 10 kVA
3 113 65	Battery cabinet for 10-20 kVA 19’’ rack

Battery cabinet (without VRLA batteries)

Item	Description
3 113 66	Battery cabinet for 1 kVA
3 113 67	Battery cabinet for 2 kVA
3 113 68	Battery cabinet for 3 kVA
3 133 69	Battery cabinet for 5-6 kVA
3 113 70	Battery cabinet for 10 kVA
3 113 71	Battery cabinet for 10-20 kVA 19’’ rack

Accessories

	Description
3 109 52	Rack support bracket kit
3 109 53	External manual Bypass for 1-3 kVA
3 109 63	External manual Bypass for 5-10kVA
3 113 79	Additional external charger for 1-3kVA
3 113 80	Additional charger for 5-10 kVA
3 113 73	Dry contact card for 1-10kVA
3 113 75	Parallel kits 5-10kVA
3 113 74	Additional distribution box for 10-20KVA
3 113 76	Dry contact card for 10-20kVA
3 113 77	BMS Card for 10-20kVA
3 113 78	Parallel kits for 10-20kVA

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

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UPS - On-line double conversion VFI

Characteristics

General characteristics	3 113 40 3 113 34	3 113 45 3 113 37	3 113 41 3 113 43 3 113 35	3 113 38 3 113 46	3 113 42 3 113 44 3 113 36	3 113 39 3 113 47
Nominal power (VA)	1000		2000		3000	
Active power (W)	1000		2000		3000	
Technology	On-line double conversion VFI-SS-11					
Waveform	Sinusoidal					
Architecture	Convertible tower and 19" rack					
Input characteristics						
Input voltage	230 V					
Input frequency	50/60 Hz ± 5% autosensing					
Input voltage range at full load	176 V - 280 V					
THD of input current	< 5%					
Input power factor	> 0.99					
Output characteristics						
Output voltage	230 V ± 1%					
Output frequency (nominal)	50/60 Hz (configurable via LCD panel) +/- 0.1%					
Efficiency	up to 92%		up to 93%			
Peak factor	3:1					
THD of output voltage	< 3% with linear load					
Output voltage tolerance	± 1%					
Internal automatic bypass	included					
External maintenance bypass	optional					
Batteries						
Backup time extension	Yes					
Internal Backup time (min)	9	-	10	-	7	-
Charging current	2A	8A	2A	8A	2A	8A
Communication and management						
Screen and signalling	Touch screen display with led status bar					
Communication ports	ROO, USB, RS232					
Remote control	Available					
Connector for network interface	SNMP					
Back feed protection	Yes					
Emergency power off (EPO)	Yes					
Dry contacts	Yes, embedded					
Parallel mode	n.a.					
Mechanical characteristics						
Dimensions (W x H x D) (mm)	440x88(2U)x454		440x 88 (2U) x 640 440x132(3U)x<600*			
Net weight (kg)	15	x	24	x	27	x
Dimensions of battery cabinet (W x H x D) (mm)	440 x 88 (2U) x 583					
Ambient conditions						
Operating temperature (°C)	0 - 40°C					
Protection index	IP 20					
Relative humidity (%)	< 95% non condensing					
Noise at 1 m (dBA)	< 50					
Certifications						
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3					

*UPS dimensions for 3 113 43- 3 113 44

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

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UPS - On-line double conversion VFI

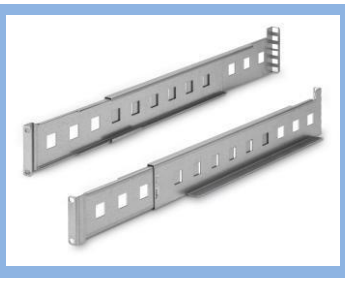
Characteristics

General characteristics	3 113 48	3 113 49	3 113 50	3 113 51	3 113 52	3 113 53	3 113 54	3 113 55
Nominal power (VA)	5000	6000	5000	6000	10000	10000	15000	20000
Active power (W)	5000	6000	5000	6000	10000	10000	15000	20000
Technology	On-line double conversion VFI-SS-11							
Waveform	Sinusoidal							
Architecture	Convertible tower and 19" rack					19'' rack		
Input characteristics								
Input voltage	1ph 230 V					1ph 230V; 3ph 400V		
Input frequency	50/60 Hz ± 5% autosensing							
Input voltage range at full load	176 V - 280 V					176 V - 280 V (1ph) 305V- 485V (3ph)		
THD of input current	< 5%					<3%		
Input power factor	> 0.99							
Output characteristics								
Output voltage	230 V ± 1%					230V/400V± 1%		
Output frequency (nominal)	50/60 Hz (configurable via LCD panel) +/- 0.1%							
Efficiency	up to 96%					up to 96%		
Peak factor	3:1							
THD of output voltage	< 3% with linear load					<2% with linear load		
Output voltage tolerance	± 1%							
Internal automatic bypass	included							
External maintenance bypass	optional							
Batteries								
Backup time extension	Yes							
Backup time (min)	6	5	-					
Communication and management								
Screen and signalling	3.5'' touch screen display with led status bar					4.3'' touch screen display with led status bar		
Communication ports	ROO, USB, RS232					RS232, BMS		
Remote control	Available							
Connector for network interface	SNMP							
Back feed protection	Yes							
Emergency power off (EPO)	Yes							
Dry contacts	Yes, embedded							
Parallel mode	Yes							
Mechanical characteristics								
Dimensions (W x H x D) (mm)	440 x 176(4U) x 700		440 x 88 (2U) x 700			440 x 132 (3U) x 535		
Net weight (kg)	54		16		18	20		
Dimensions of battery cabinet (W x H x D) (mm)	440 x 88 (2U) x 680				440 x 132(3U) x 700	440 x 132 (3U) x 570		
Ambient conditions								
Operating temperature (°C)	0 - 40°C							
Protection index	IP 20							
Relative humidity (%)	< 95% non condensing							
Noise at 1 m (dBA)	< 50					≤55		
Certifications								
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3							

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

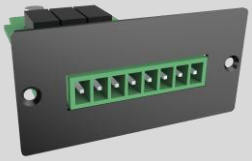
Accessories

Rack support bracket kit:
For installing equipment with a 19” rack-mounting rail kit



External manual Bypass:
Ensures uninterrupted operation of the critical load during maintenance and testing or in the event of a UPS failure.

External charger:
designed to reduce the charging time of battery banks connected to the UPS.



Dry contact card:
allows to have a series of normally open or normally closed clean contacts (voltage-free) to indicate UPS operations

Distribution box:
Additional rackmount distribution box with integrated In/Out/Maintenance Bypass switches and backfeed contactor

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

AD-EXLGUPS-DP20B/GB - 07/2020