KEHUA TECH

stock code
002335.SZ
kehua Data Co.,Ltd

UPS Catalog

Low Voltage Series

Global UPS

Competitive Strategy Innovation and Leadership Award (Frost & Sullivan)

No.4

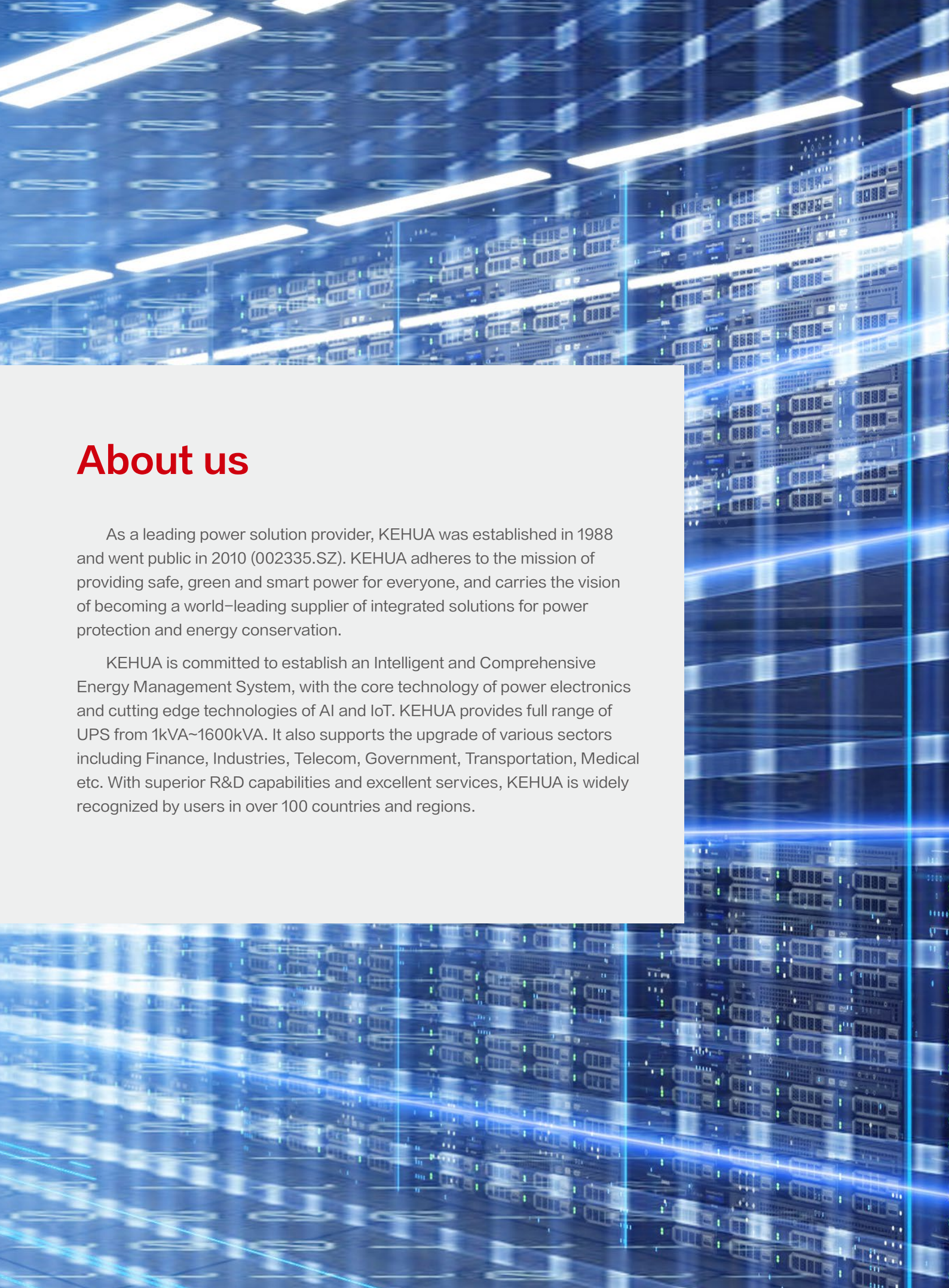
World largest supplier of modular UPS (Omdia 2023)

No.1

Chinese UPS market in the field of transportation (CCID 2022)

No.1

Chinese UPS marker share (FORWARD 2023)



About us

As a leading power solution provider, KEHUA was established in 1988 and went public in 2010 (002335.SZ). KEHUA adheres to the mission of providing safe, green and smart power for everyone, and carries the vision of becoming a world-leading supplier of integrated solutions for power protection and energy conservation.

KEHUA is committed to establish an Intelligent and Comprehensive Energy Management System, with the core technology of power electronics and cutting edge technologies of AI and IoT. KEHUA provides full range of UPS from 1kVA~1600kVA. It also supports the upgrade of various sectors including Finance, Industries, Telecom, Government, Transportation, Medical etc. With superior R&D capabilities and excellent services, KEHUA is widely recognized by users in over 100 countries and regions.

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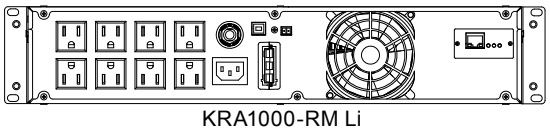
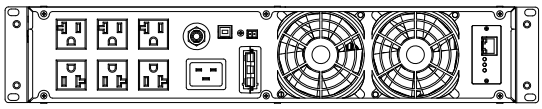
KRA-RM Li Series Lithium Battery UPS

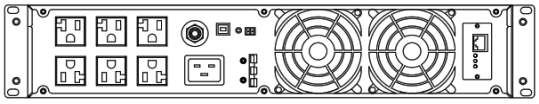
(1-3kVA)



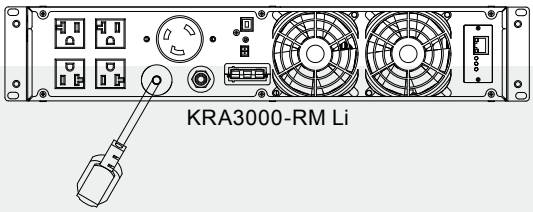
KRA1000-RM Li



KRA2000-RM Li



KRA2200-RM Li



KRA3000-RM Li

Built-in Lithium-ion Battery

- Super-long backup time - 11 minutes backup time by internal battery
- Wide temperature range - tolerant for up to 60°C with no harm to the battery
- Internal lithium-ion battery long service life - up to 8 years of service life
- More circles for charge and recharge - up to than 1000 times
- Environment-friendly - lithium-ion battery

Green Power

- AC/AC efficiency up to 93.0%, less operation cost and more energy saving

Compact Dimension

- Space-saving, easy for installation

Rotatable LCD display

- The LCD display easily rotate for horizontal and vertical application

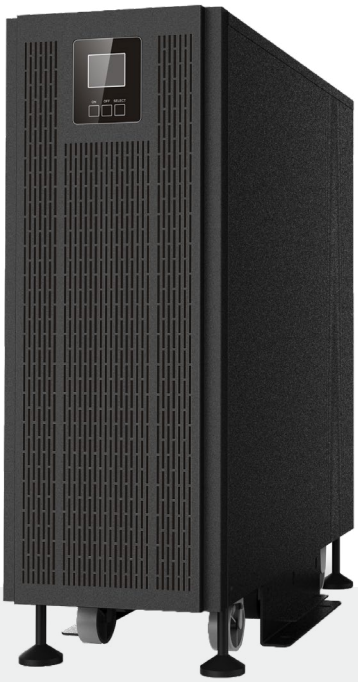
Technical Specification

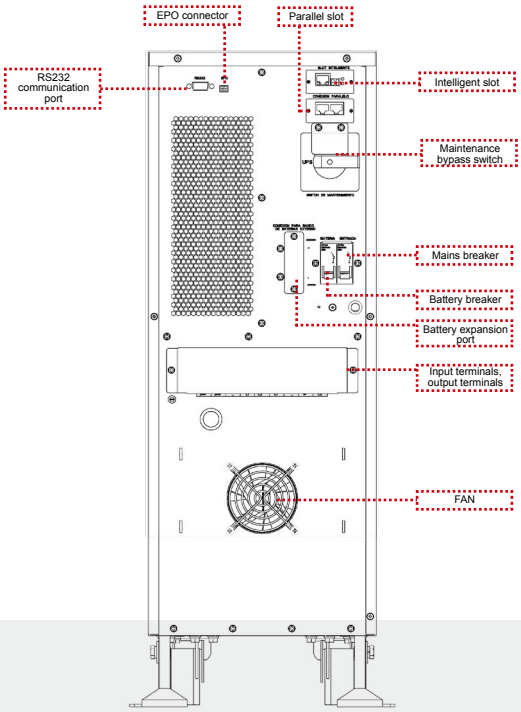
MODEL	KR1000A-RM Li	KR2000A-RM Li	KR2200A-RM Li	KR3000A-RM Li
INPUT				
Voltage (Vac)	60-148			
Frequency (Hz)	50/60±10% (50/60Hz auto-sensing)			
Power Factor	≥0.99			
THDi	<5% (linear load)			
OUTPUT				
Capacity (VA)	1000	2000	2200	3000
AC/AC Efficiency	91.7%	92.5%	92.6%	92.5%
Power Factor	0.9			
Voltage (Vac)	110/120±1%			
Frequency (Hz)	50/60±0.1 (battery mode)			
THDv	<3% (linear load)			
Transfer Time (ms)	0			
ECO Mode	Yes			
Overload	101%~130% for 1 min, 131%~150% for1s, above 150% for 200ms			
LITHIUM-ION BATTERY				
Voltage (Vdc)	24	48	72	72
Backup Time (mins)	11	11	22	11
Charging Current (A) Max.	4			
GENERAL				
Communication Interface	USB, SNMP (slot) (RS232+dry contact is optional in slot)			
Output Outlet	(8) 5-15R	(6) 5-20R	(6) 5-20R	(4) 5-20R + (1) L5-30R
Display	LCD displays the running status of UPS			
Alarm	Battery low-voltage, mains abnormal, UPS fault, output overload			
Protection	Battery under-voltage protection, overload protection, short-circuit protection, over-temperature protection, input over-voltage protection			
Noise (dB)	< 55			
Working Temperature	0~40℃			
Relative Humidity	0 ~ 95%, no condensation			
Dimension (W×D×H) (mm)	438×420×87	438×570×87	438×615×87	438×570×87
Weight (kg)	8.9	13.6	19.1	17.1

- Specification is subject to change without prior notice.

KR11-T Series

(6-10kVA)





High Performance

- Input power factor up to 0.996, low THDi (< 5%), decrease the pollution to utility power
- AC/AC efficiency up to 93.5%, energy saving and low CO_2 emission
- Wide input voltage range allows the UPS to work in harsh electrical environments
- Visualized LCD display providing comprehensive information including working status, operation data, et

Excellent Flexibility

- Output voltage is selectable via LCD
- Batteries total quantity settable (16/17/18/19/20 for 6-10kVA)
- Maintenance bypass
- Battery disconnection alarm (optional)
- SNMP, RS485+dry contact, USB, Protocol transfer kit(optional)
- Charging voltage temperature compensation (optional)
- Parallel Kit (optional)

Outstanding Profitability

- Minimum 0.16m^2 footprint, more units are available for delivery and installation
- Output voltage 120/208/220/230/240Vac, suitable different application
- Optional external battery pack for the standard model to improve system availability
- Full galvanic isolation for safer operation and stronger load adaptability

Technical Specification

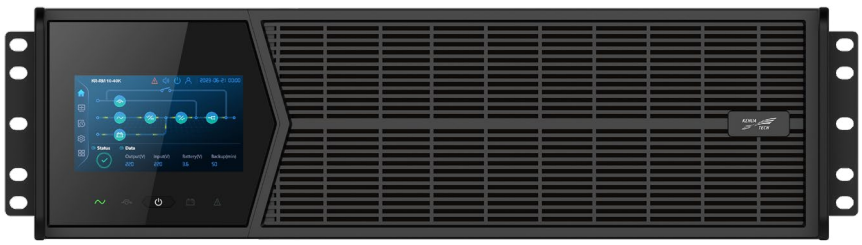
MODEL	KR6000T	KR1110T
INPUT		
Voltage (Vac)	80~275	
Frequency (Hz)	50/60±10% (50/60Hz auto-sensing)	
Power Factor	≥0.99	
THDi	<5% (linear load)	
Phase	3W (L+N+G/L1+L2+G)	
OUTPUT		
Capacity (kVA)	6	10
Power Factor	0.9	
Voltage (Vac)	120/208/220/230/240±1% (settable on display panel and output wiring line)	
Frequency (Hz)	50/60±0.2% (battery mode)	
THDv	THD<1% (linear load), THD<4% (nonlinear load)	
Transfer Time (ms)	0	
Max. Efficiency	93.5%	
Crest Factor	3:1	
Overload	105%<Load≤130%:10mins,130%<Load≤150%: 30s,>150%: 0.5s.	
BATTERY		
Battery Voltage (Vdc)	192 (192~240V settable)	
Battery Type	16×7AH12V/External	16×9AH12V/External
Charging Current (A)	1A (default); 1~8A settable (external battery)	
GENERAL		
Communication Interface	RS232, EPO (SNMP, USB, RS485+dry contact, Protocol transfer kit are optional in slot)	
LCD Display	AC input & output voltage, frequency, load level, battery level, temperature; AC mode, battery mode, bypass mode, and fault	
Alarm	Low battery, abnormal AC input, UPS failture, etc.	
Protection	Low battery, overload, short-circuit and over temperature, etc.	
Noise (dB)	50	
Working Temperature (°C)	-5~40	
Relative Humidity	0~95%, no condensation	
Dimension (W×D×H) (mm)	250×660×720	
Weight (Kg)	96/60	113/73

- Specification is subject to change without prior notice.

* Capacity will derate when battery voltage between ±144~±180

KRA-RM Series

(10-20kVA)



Green Power

- Low THDi: 3% at linear load
- High AC/AC efficiency up to 96%
- Low noise, Less noise pollution

Excellent Flexibility

- 3U height tower and rack compatible design
- Adjustable input and output to 33\31\11
- Common battery
- Touch screen display, easy for setting and information checking.
- Adjustable battery pcs and charging current
- Intelligent slots design, for different communication choice

Advanced Technology

- Super wide input voltage range -60%~+25% for high grid adaptability
- Dual DSP control technology for top perfomance
- Anti-corrosion resistant coating for all PCB boards
- Intelligent fan speed control reduces the noise and prolongs fan service life
- Anti-corrosion resistant coating in all PCB boards
- ECO and EPO

More Options

- External UPS input and output distribution box
- Dry contact kits and SNMP
- Input and output isolation transformer
- 19 inch rail kits

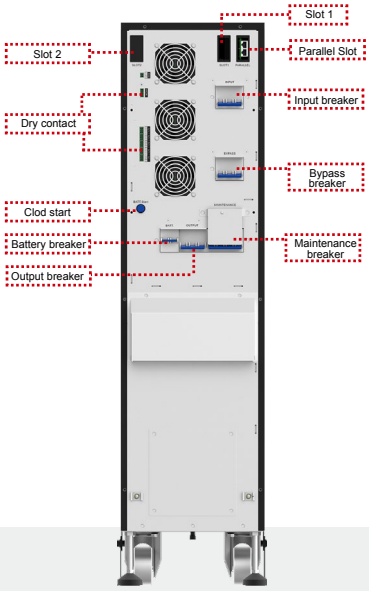
Technical Specification

MODEL		KRA10KVA-RM	KRA20KVA-RM
INPUT			
Voltage (Vac)[1]		10~20KVA: 121~268 (155~268) 10~40KVA: 138-485 (305-485)	
Frequency (Hz)		40-70	
Power Factor		≥0.99	
THDi		<3% (linear load)	
Phase		1:1/3:1/3:3	3:1/3:3
OUTPUT			
AC/AC Efficiency (Max.)		96%	
Power Factor		1.0 (at 40°C, allow derating at low pressure input)	
Voltage (Vac)		380/400/415±1% (L-L)	
Frequency (Hz)		50/60±0.1 (battery mode)	
THDv		THD <2% (linear load), THD < 4% (nonlinear load)	
Transfer Time (ms)		0	
Overload		105%~110%: 60min, 110%~130% load: 10 min, 130%~155% load: 1 min, 155%□Load: 200ms	
ECO Mode		Yes	
BATTERY			
Voltage (Vdc)		±192 (±96~±240 adjustable, Minimum ±96Vdc derating to 50% load	
Charging Current (A)		4 (1-10 settable)	10 (1-20 settable)
GENERAL			
Communication Interface		RS232+EPO (RS485+Dry contact, SNMP, Protocol Conversion Kit are optional in slot)	
Display		4.3" touch screen	
Alarm		Low battery, abnormal AC input, UPS failure, etc.	
Protection		Low battery, overload, short-circuit and over temperature, etc.	
Noise (dB)		< 60	
Working Temperature (°C)		-5~40	-5~50
Relative Humidity		0 ~ 95%, no condensation	
Dimension (W×D×H)(mm)	UPS	438×500×130(3U)	438×680×130 (3U)
	Distribution Box	438×500×130(3U)	438×680×130 (3U)
	Batt. Pack	438×500×130(3U)	438×680×130 (3U)
Weight (kg)	UPS	20	34
	Distribution Box	8	14

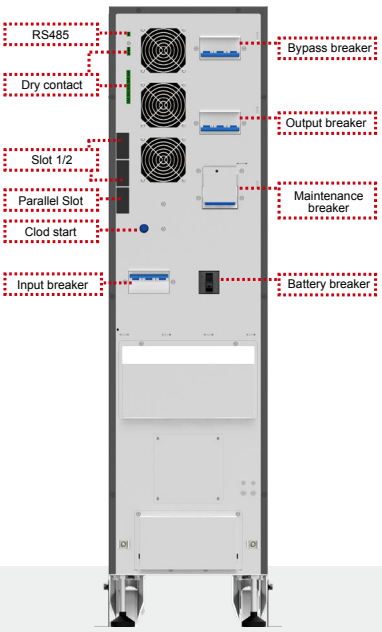
- Specification is subject to change without prior notice.

MYA Series

(10-30kW)



MY10A



MY30A

Green Power

- AC/AC efficiency up to 94%, ECO mode up to 98%, less TCO and more energy saving
- PF=1.0, kVA=kW, more powerful to connect more critical loads
- 3 level IGBT technology for higher efficiency and minimized interference to grid
- Self-load test function

Flexible Design

- Dual input design for mains and bypass
- Built-in battery and flexible battery configuration
- 5 min back-up time
- Easy onsite parallel slot modification
- Frequency converter function
- Cold start function
- 2 optional slot for SNMP and dry contact
- Dry contact signal selectable, input signal 13 choose 5, output 5 choose 1
- Internal transformer or internal battery

Advanced Technology

- Dual DSP control for top performance
- Intelligent fan speed control reduce noise and prolongs fan life
- Anti-corrosion resistant coating for all PCB boards
- Full protection with input, output, bypass, maintenance
- bypass and battery breaker
- ECO mode and EPO function

Technical Specification

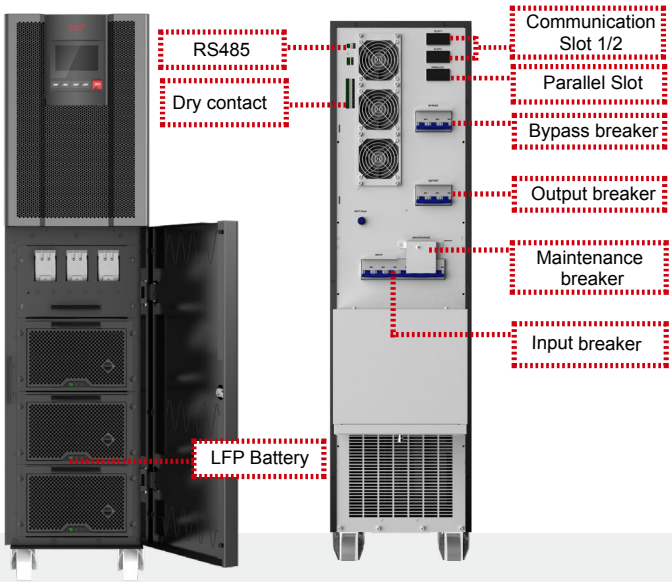
MODEL	MY10A	MY15A	MY20A	MY30A
INPUT				
Voltage (Vac)	156~260 (L-L)			
Frequency (Hz)	40-70			
Power Factor	≥0.99			
THDi	<3% (linear load)			
Dual Main Input	Yes			
OUTPUT				
Capacity (kW)	10	15	20	30
AC/AC Efficiency (Max.)	94%			
Power Factor	1.0			
Voltage (Vac)	190/200/208/220±1% (L-L)			
Frequency (Hz)	50/60±0.1 (battery mode)			
THDv	<1% (linear load), <3% (non-linear load)			
Transfer Time	0			
Overload	<105% continues, 105%~110% 60mins, 110%~130% load for 10 min, 130%~150% load for 1 min, >150% load: change to bypass immediately			
ECO Mode	Yes			
BATTERY				
Voltage (Vdc)	±120 (±96~±120 adjustable)	±96 (±96~±120 adjustable)	±120 (±96~±120 adjustable)	±120 (±96~±120 adjustable)
Internal Battery	20×9AH/12V	32×9AH/12V	40×9AH/12V	80×9AH/12V
Battery Number	1/2/3 battery pack (1 pack=16~20 pcs optional for different backup time, max 60 pcs)			1/2/3/4 battery pack max 80pcs
Charging Current (A)	1-10 settable	1-20 settable		
OTHER				
Communication Interface	RS485+EPO, 5 output dry-contact (13 choose 5), 1 input dry-contact (5 choose 1) (RS232, SNMP are optional in slot)			
Display	Touch screen+LED/LCD			
Alarm	Low battery, abnormal AC input, UPS failure, etc.			
Protection	Low battery, overload, short-circuit and over temperature, etc.			
Noise (dB)	<55			<65
Working Temperature (°C)	-5~40			
Relative Humidity	0 ~ 95%, no condensation			
Dimension (W×D×H)(mm)	280×835×1100			320x880x1250
Weight (kg)*	93	109	109	139

- Specification is subject to change without prior notice.

* Capacity will derate when battery voltage between ±144~±180

Eon-Li Series

(10-30kW)



Safe

- Four breaker design
- Overload at PF=1.0@40°C, no derating
- Safe short circuit protection, 10-200ms settable
- Back-feed protection function

Green Power

- Low THDi <3%
- AC/AC efficiency up to 94%, ECO efficiency up to 99%

Intelligent

- Self-load test function
- Battery management, intelligent charging
- Smart de-dust function
- Bus capacitor life visual

Convenient

- Battery hot swappable design
- Cold start button
- Built-in lithium battery

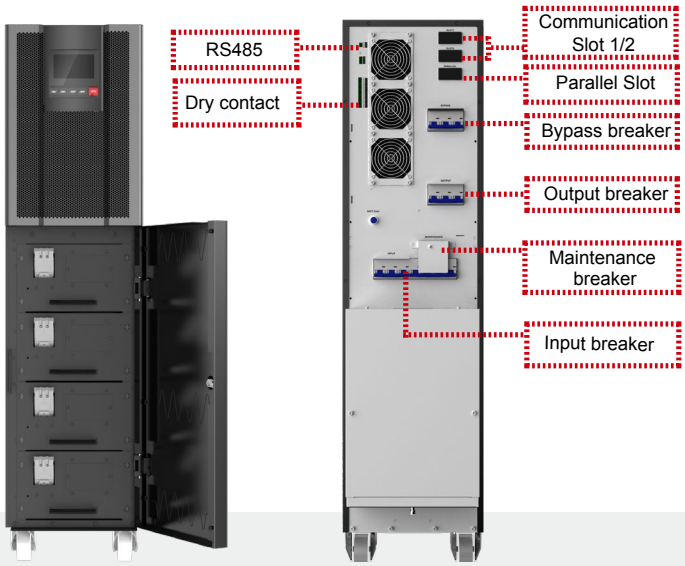
Technical Specification

MODEL	Eon10Li	Eon20Li	Eon30Li
INPUT			
Input Voltage (Vac)	208/220 (3W+N+G)		
Input Voltage Range (Vac)	120V-156V linear derating, 156V-268V at full load		
Frequency (Hz)	40-70		
Power Factor	≥0.99		
THDi	<3%		
Dual Mains Input	Yes (default single mains input)		
OUTPUT			
Capacity (kW)	10	20	30
AC/AC Efficiency (Max.)	94%		
Power Factor	1.0		
Voltage (Vac)	190/200/208/220±1% (L-L) ±1% (default is 208V)		
Frequency (Hz)	50/60±0.1 (battery mode)		
THDv	THD <1% (linear load), THD <4% (nonlinear load)		
Overload	<105% continues, 105%~110% 60mins, 110%~130% load for 10 min, 130%~155% load for 1 min, 155%~200% load for 200ms, >200% load: change to bypass immediately		
ECO Mode	Yes		
ECO Efficiency	99%		
LITHIUM BATTERY BATTERY			
Battery Cell Capacity (Ah)	50		
Battery Pack Voltage (Vdc)	240		
Internal LFP Module Quantity	1 module (1-3 selectable)	2 module (2-3 selectable)	3 module
Charging Current (A)	2~40 settable (default is 20)		
Weight	37kg (81lb)		
COMMUNICATION			
Communication Interface	RS485+EPO+Dry contact (1 input,5 output)+2 Slots+SNMP (optional)		
Display	4.3 Inches Touch Screen		
ENVIRONMENTAL			
Noise (dB)	<63		<68
Working Temperature (°C)	-5~50(40~50 derating)		
Relative Humidity	0 ~ 95%, no condensation		
DIMENSION AND WEIGHT			
Dimension (W×D×H)(mm)	378×993×1250mm (14.9*39.1*49.2in)		
Package Dimension (HxWxD)	456x1110x1390mm (18*55*438in)		
Weight (kg) (Without battery)	94kg(207lb)	103kg(227lb)	110kg(2421b)
Weight (kg)*	135kg (298lb)	177kg (390lb)	220kg (485lb)

- Specification is subject to change without prior notice.

Eon Series

(10-30kW)



Safe

- Four breaker design
- Overload at PF=1.0@40°C, no derating
- Safe short circuit protection, 10-200ms settable
- Back-feed protection function

Green Power

- Low THDi <3%
- AC/AC efficiency up to 94%, ECO efficiency up to 99%

Intelligent

- Self-load test function
- Battery management, intelligent charging
- Smart de-dust function
- Bus capacitor life visual

Convenient

- Battery hot swappable design
- Cold start button
- Built-in lithium battery

Technical Specification

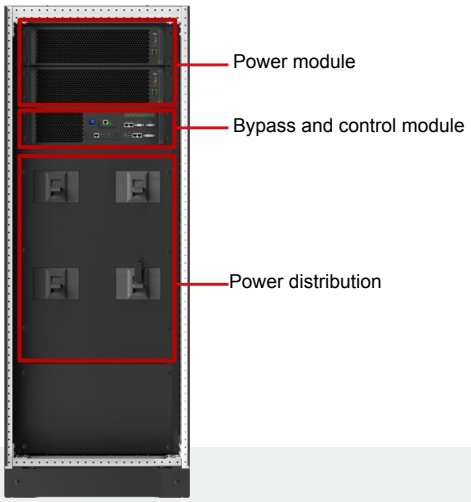
MODEL	Eon10	Eon20	Eon30
INPUT			
Input Voltage (Vac)	208/220(3W+N+G)		
Frequency (Hz)	40-70		
Power Factor	≥0.99		
Input Voltage Range	120V-156V linear derating, 156V-268V at full load		
THDi	<3%		
Dual Mains Input	Yes (default single mains input)		
OUTPUT			
Capacity (kW)	10	20	30
Output performance claasification(according to IEC 60240-3	VFI-SS-111		
AC/AC Efficiency (Max.)	94%		
Power Factor	1.0		
Voltage (Vac)	190/200/208/220±1%(L-L) ±1% (default is 208)		
Frequency (Hz)	50/60±0.1 (battery mode)		
THDv	THD <1% (linear load), THD <4% (nonlinear load)		
Overload	<<105% continues, 105%~110% 60mins, 110%~130% load for 10 min, 130%~150% load for 1 min, 150%~200% load for 200ms		
ECO Mode	Yes		
ECO Efficiency	99%		
BATTERY VRLA			
Battery Cell Capacity(Ah)	9		
Battery Voltage (Vdc)	±120 (±96~±120 , ±48 cells~±60 cells, 2V/cell)		
Internal Battery String Quantity	Standard 2 strings (1-4 selectable)	Standard 3 strings (1-4 selectable)	Standard 4 strings (1-4 selectable)
Charging Current (A)	1-10 settable		1-20 settable
COMMUNICATION			
Communication Interface	RS485+EPO+Dry contact(1 input, 5 output)+2 Slot+SNMP(optional)		
Display	4.3 Inches Touch Screen		
ENVIRONMENTAL			
Noise (dB)	<60		<65
Working Temperature (°C)	-5~50(40~50 derating)		
Relative Humidity	0 ~ 95%, no condensation		
DIMENSION AND WEIGHT			
Dimension (W×D×H)(mm)	378×993×1250mm(14.9*39.1*49.2in)		
Package dimension(W×D×H)()	456x1110x1390mm(18x55x438in)		
Weight (kg)*	211kg(465lb)	276kg(609lb)	340kg(750lb)

- Specification is subject to change without prior notice.

* Without battery

MYA Series

(40-120kW)



Green Power

- AC/AC efficiency up to 94.5% and 30% load up to 94% efficiency reduces heat dissipation and limits power consumption costs
- High input power factor up to 0.99 and low Input THDi: < 3.0% at full load, much less grid pollution and costs
- Intelligent sleep mode which UPS sleep in random keep maximum efficiency and energy saving

Flexible Design

- Colorful 7" touch screen with LED Indicators.
- Main unit display allows to check the information of each UPS status during parallel mode.
- Flexible Network Management: SNMP
- Expanded dry contact kit (4 in 4 out)
- BMS kit for lithium battery communication

Advanced Technology

- Latest generation IGBT and three level technology
- Dual DSP control for top performance
- Intelligent fan control and redundant design: 15% load can be driven when 2 fans fail and 40% load when 1 fan fails
- Anti-corrosion resistant coating for all PCB boards
- Separate internal air channel which hot air drives directly towards heat sink without distressing the PCB's and other internal sensitive components

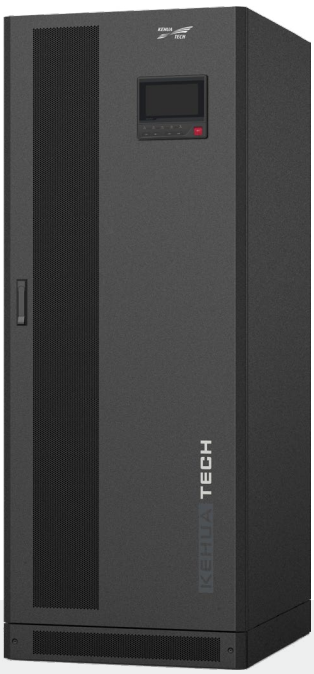
Technical Specification

MODEL	MY40A	MY50A	MY60A	MY80A	MY100A	MY120A
INPUT						
Voltage (Vac)	70-155 (L-N) / 120-268 (L-L)					
Frequency (Hz)	40~70 (linear load)					
Power Factor	≥0.99					
Phase	3φ4W+PE					
THDi at full linear load	<3%					
BYPASS						
Bypass Voltage (Vac)	208±20%					
Frequency Range (Hz)	50/60 (±5%/±10%)					
Overload	≤130%: long run; 130%< load ≤150%: 5min; 150%< load ≤200%: 1s; 200%< load≤300%: 100ms; >300%: immediately.					
OUTPUT						
Capacity (kW)	40	50	60	80	100	120
Power Factor	1 (0.5 leading to 0.5 lagging)					
Voltage (Vac)	190/200/208/220±1%					
Frequency (Hz)	50/60±0.1% (Battery mode)					
Phase	3φ4W+PE					
Three Phase Difference	≤1%					
THDv	<1% (at linear load), <4% (at non-linear load)					
Transfer Time (ms)	0					
AC-AC Efficiency	up to 94%					
Overload	101-105% Long run, 106-110% load for 60 minutes, 111%-125% load for 10 minutes, 126%-150% load for 1 minute, over 150% load transfer to bypass					
BATTERY						
Battery Voltage (Vdc)	±120 (±120~±144 adjustable)					
Battery Type	External					
Charging Current (A) MAX	30			60		
GENERAL						
Communication Interface	RS485, RS232/MODBUS, dry contact (BMS, SNMP, expend dry contact card are optional in slot)					
Display	7" touch screen+LED					
Alarm	AC input abnormal, low battery, overload, failure					
Protection	Output short-circuit, overload, over-temperature, battery low voltage, output over/low voltage					
Noise (dB)	<68					
Altitude(m)	0-2000 no derate					
IP Grade	IP20					
Working Temperature (°C)	0 ~ 40 no derate, 40~50 auto derate.					
Relative Humidity	0 ~ 95%, no condensation					
Dimension (W×D×H)(mm)	600×1000×1800					
Weight (kg)	161			260		

- Specification is subject to change without prior notice.

FR-UK33A Series

(10-200kVA)



Advanced Technology

- Online double conversion
- Fully DSP control
- No-master-slave N+1 parallel technology
- Advanced battery charging management
- DC startup function
- Advanced no-master-slave parallel technology (optional)

High Reliability

- Wide input voltage range
- IGBT inverter and output isolation transformer
- Intelligent fan speed control
- Allow 100% three phase unbalance load
- ECO mode and EPO function
- Intelligent fans control
- Bypass isolation transformer (optional)

Excellent Flexibility

- Intelligent RS232/RS485 communication port
- Intelligent battery monitor system - MMBM (optional)

Technical Specification

MODEL	FR-UK 3310A/FR-UK3310AS	FR-UK 3320A/FR-UK3320AS	FR-UK 3330A/FR-UK3330AS	FR-UK 3340A	FR-UK 3350A	FR-UK 3360A	FR-UK 3380A	FR-UK 33100A	FR-UK 33120A	FR-UK 33160A	FR-UK 33200A
INPUT											
Voltage (Vac)	208/220 ±20% (±25% optional)										
Rectifier Frequency (Hz)	40～70										
SYNC Frequency Tracking (Hz)	50/60±10% (±5% optional)										
Phase	3φ4W+PE										
OUTPUT											
Capacity (kVA)	10	20	30	40	50	60	80	100	120	160	200
Power Factor	0.8 (0.9 optional)										
Phase	3φ4W+PE										
Voltage (Vac)	L-N: 120/127±1%, L-L: 208/220±1%										
Frequency (Hz)	50/60±0.5% (battery mode)										
Waveform	Pure sine wave, THD≤3% (linear load)										
3 Phases 100% Load Unbalance Voltage Stability	≤2%, allow 100% unbalance										
Overload	105% load for 60mins, 125% load for 10mins, 150% load for 1 min										
BATTERY											
Voltage (Vdc)	192			348 (360 settable)							
Battery Type	External /Max. 64pcs 7AH 12V			External							
Charging Current (A) Max.	10~40 settable										
Battery Self-testing	Automatically alarm and estimate battery status in battery abnormal status										
GENERAL											
Maintenance Bypass	Yes										
Communication Interface	MODBUS/RS485 and dry contact (RS232 and SNMP adapter are optional)										
Display	Touch screen display indicates frequency, voltage, load, battery voltage, etc. LED indicates running status										
Alarm	Overload, abnormal AC input, low battery, UPS failure										
Protection	Low battery, overload, over temperature, short circuit, output over voltage, output low voltage										
Noise (dB)	<65										
Working Temperature (°C)	0 ~ 40										
Relative Humidity	0 ~ 95%, no condensation										
Dimension (W×D×H)(mm)	500×800×1180 /500×800×1600			500×800×1600			1400×1000×1850				1600×1000 ×1850
Weight (kg)	300/500	325/530	340/540	590	620	670	970	1000	1200	1450	1700

- Specification is subject to change without prior notice.
- If the higher charging current is adjusted, the UPS capacity shall be derated.

Reliable • Flexible • Responsible

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