

# UPS



## Product Overview

UPS products all adopt high-frequency on-line double conversion technology. UPS products all adopt high-frequency on-line double conversion technology, with capacity covering 1KVA-600KVA, which can be widely used in large, medium and small data rooms of various industries, as well as industrial control, transport, communication industry, energy industry, laboratories and other fields. Provide users with stable, safe and reliable high-quality uninterruptible power supply.

## Applications

- ▶ Energy
- ▶ Data Centres
- ▶ Building Infrastructure
- ▶ Government, Healthcare, Education
- ▶ Transportation, Agriculture, Industrial Manufacturing



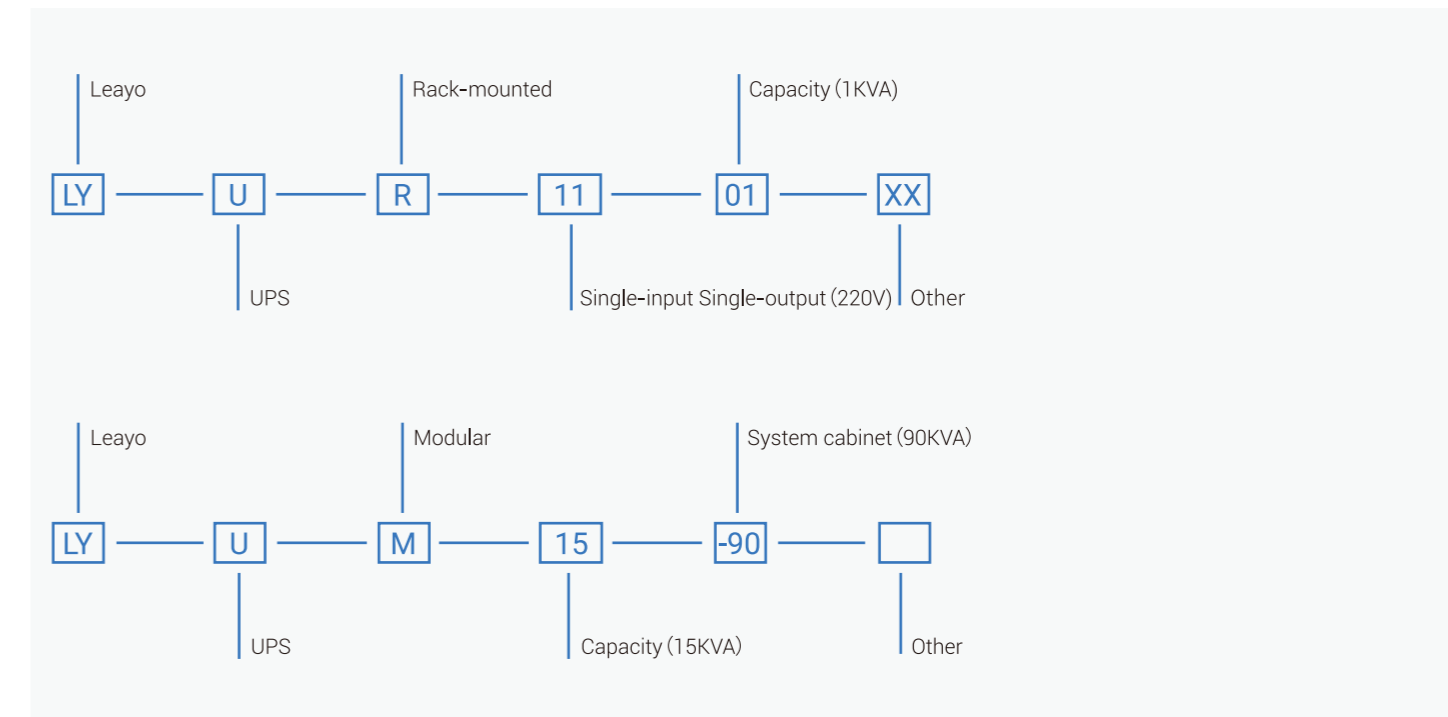
## Product Series

		
LY-UR Series Rackmount UPS Capacity range 1-40KVA	LY-UT Series Tower UPS Capacity range 1-600KVA	LY-UM Series Modular UPS Capacity range 10-600KVA

## Model

Field 1	Meaning of Field 1	Field 2	Meaning of Field 2	Field 3	Meaning of Field 3	Field 4	Meaning of Field 4	Field 5	Meaning of Field 5
LY	Leayo Brand	B	Battery	A	Normal	12	Voltage 12V	100	100AH
		U	UPS	R	Rack-mounted	11	Single-input Single-output	10	10KVA
				T	Tower	31	Three-input Single-output	10	10KVA
				M	Modular	15	15K module		
15	15K module	-90	90K System cabinet						

## Naming conventions



Note: Modular UPS without "-" is a power module, which cannot be used as a UPS alone, and needs to be equipped with an adapted system cabinet.



# UPS LY-UR11 Series Rackmount UPS

## 1-3kVA



### Product Overview

Leayo LY-UR11 series UPS is a new generation of general-purpose UPS designed and manufactured by Leayo, which is compatible with tower or rack mounting, and adopts on-line, double-conversion architecture design, which is able to provide better power environment for the user loads compared with on-line interactive or backup UPS models.

The product is widely used in government, finance, education, small and medium enterprises and other units of IT load equipment.

### Power Range Working Method

1-3kVA

single in, single out

### Application Fields

Inter-network and intelligent cabinet room solutions for enterprises, shopping malls, government, finance, medical care, education and other fields.

### Performance Characteristics

- On-line double conversion design, compatible with tower \ rack mounting.
- Liquid crystal display, easy to operate and maintain.
- Wide input voltage (110Vac to 300Vac), adapt to suboptimal grid environment.
- Input power factor  $\geq 0.99$ , green power design.
- Output power factor 1, strong load-carrying capacity.
- Utility mode efficiency up to 94% or more, high efficiency and energy saving.
- Long-lasting model charging current up to 12A, multi-stage intelligent charging management.
- Under-voltage, over-voltage, short-circuit, over-temperature, protection and other perfect protection mechanisms.
- Standard RS232 interface, optional SNMP card, USB port.

### Product Characteristics

#### Flexible Installation

- Compatible with tower or rack mounting, easy to cope with different installation environments.

#### Pure Sine Wave Output

- Adopting on-line double conversion architecture and digital control technology, the pure sine wave output can be used with various types of loads, providing the best power protection for the user's load equipment.

#### Zero conversion time

- Zero switching time between utility mode and battery mode when the utility power goes out and comes back on, which effectively ensures the reliability of load operation.

#### Green Power Design

- The input power factor is up to 0.99, which reduces the pollution to the power grid and meets the design concept of green power supply.

#### Auto-start function

- When the utility power is interrupted and then restored, the UPS will automatically start up, no need to manually start up the UPS again, realising the function of unattended operation.

#### Intelligent Battery Management

- Adopting multi-stage battery charge management technology, it has powerful charging capability and supports the configuration of large capacity battery packs.

#### Available with generator

- With a wide range of input voltage and frequency, UT11 series can be used with branded generators to provide pure, safe and stable power supply to the load.

### Detailed parameters

Model LY-UR11		1101S	1101	1102S	1102	1103S	1103
Capacity/Power		1kVA/1kW		2kVA/2kW		3kVA/3kW	
Input	Input Configuration	L+N+PE					
	Rated input voltage	208/220/230/240VAC					
	Voltage range	110~300VAC					
	Frequency range	44~56Hz or 54Hz~66Hz , Default					
	Input power factor	$\geq 0.99$					
Output	THDi	$\leq 4\%$ (Linear Load) $\leq 5\%$ (Non-linear Load PF=0.8) PF=0.8					
	Output Configuration	L+N+PE					
	Output voltage	208/220/230/240VAC					
	Output accuracy	$\pm 1\%$					
	Output frequency	Online Mode: Follow the mains frequency, Battery mode:50/60Hz $\pm 0.1\%$					
	THD	$\leq 3\%$ (Linear Load) $\leq 5\%$ (Non-linear Load)					
	Output power factor	1					
	Switching time	Mains Mode $\leftrightarrow$ Battery Mode: 0ms , Inverter mode $\leftrightarrow$ Bypass mode: 4ms					
	Overload capacity	Mains mode:30min@102%~110% Load; 10min@110%~130% Load; 30s@130%~150%Load; 200ms@>150% Load					
		Battery mode:1min@102%~110% Load; 10s@110%~130% Load; 3s@130%~150% Load; 200ms@>150% Load					
Efficiency (Mains Mode)		94.5%		95.5%		95.5	
Battery	Battery voltage	Built-in 2x12V 7AH/9AH battery	36Vdc	Built-in 4x12V 7AH/9AH battery	72Vdc	Built-in 6x12V 7AH/9AH battery	96Vdc
	Charging current	1A	1-12A(max)	1A	1-12A(max)	1A	1-12A(max)
Display interface		LCD display interface, support operation mode/load/power/input/output, etc.					
communication interface		RS232 communication interface is standard, SNMP smart card and USB interface are optional					
Environment	Operating temperature	0~40°C					
	Operating Humidity	20%~95% non-condensing					
	Altitude	Should not exceed 1000m, derated above 1000m, with a maximum of 4000m, refer to IEC 62040.					
Dimensions	DxWxH(mm)	315x438x86.8		400x438x86.8		500x438x86.8	400x438x86.8
Weight	Net weight(kg)	9.8/10.8	4.8	16.4/18.4	8	21/24	8.2

# LY-UR11 Series Rackmount UPS

## 6-10kVA



### Product Overview

Leayo LY-UR11 series UPS is a new generation of general-purpose UPS designed and manufactured by Leayo, which is compatible with tower or rack mounting, and adopts on-line, double-conversion architecture design, which is able to provide better power environment for the user loads compared with on-line interactive or backup UPS models.

The product is widely used in government, finance, education, small and medium enterprises and other units of IT load equipment.

### Power Range Working Method

6-10kVA

single in, single out

### Application Fields

Inter-network and intelligent cabinet room solutions for enterprises, shopping malls, government, finance, healthcare, education and other fields.

### Performance Characteristics

- On-line double conversion design, digital control technology.
- Wide input voltage (110Vac to 300Vac), adapt to harsh grid environment.
- Liquid crystal display, easy to operate and maintain.
- Input power factor  $\geq$  0.99, green power supply design.
- Output power factor 1, strong load-carrying capacity.
- Mains mode efficiency of up to 95% or more, high efficiency and energy saving.
- Long-lasting models with charging current of up to 12A, multi-stage charging Management.
- Undervoltage, overvoltage, short-circuit, over-temperature, protection and other perfect protection mechanism.
- Standard RS232 interface, EPO interface, optional SNMP card, USB port.

### Product Characteristics

#### ▼ The bypass protection

- The bypass power supply function makes the UPS emergency handling ability greatly strengthened, so that the user's load equipment from the danger of power failure.

#### ▼ Pure Sine Wave Output

- Adopting on-line double conversion architecture and digital control technology, the pure sine wave output can be used with various types of loads, providing the best power protection for the user's load equipment.

#### ▼ Zero conversion time

- Zero switching time between utility mode and battery mode when the utility power goes out and comes back on, which effectively ensures the reliability of load operation.

#### ▼ Green Power Design

- The input power factor is up to 0.99, which reduces the pollution to the power grid and meets the design concept of green power supply.

#### ▼ Auto-start function

- When the utility power is interrupted and then restored, the UPS will automatically start up, no need to manually start up the UPS again, realising the function of unattended operation.

#### ▼ Intelligent Battery Management

- Adopting multi-stage battery charge management technology, it has powerful charging capability and supports the configuration of large capacity battery packs.

#### ▼ Available with generator

- With a wide range of input voltage and frequency, UT11 series can be used with branded generators to provide pure, safe and stable power supply to the load.

### Detailed parameters

Model LY-UR		LY-UR1106	LY-UR1110
Capacity/Power		6kVA/6kW	10kVA/10kW
Input	Input Configuration	L+N+PE	
	Rated input voltage	208/220/230/240VAC	
	Voltage range	110~300VAC	
	Frequency range	44~56Hz or 54Hz~66Hz	
	Input power factor	$\geq$ 0.99	
Output	Output Configuration	L+N+PE	
	Output voltage	208/220/230/240VAC	
	Voltage accuracy	$\pm$ 1%	
	Output frequency	Online Mode: Follow the mains frequency, Battery mode:50/60Hz $\pm$ 0.1%	
	THD	$\leq$ 2% (Linear Load) $\leq$ 5% (Non-linear Load)	
	Output power factor	1	
	Switching time	0ms	
	Overload capacity	Mains mode:30min@102%~110% Load; 10min@110%~130% Load; 30s@130%~150%Load; 200ms@>150% Load	
		Battery mode:10min@102%~110% Load; 1min@110%~130% Load; 10s@130%~150% Load; 200ms@>150% Load	
	Efficiency (Mains Mode)		95%
Battery	Battery voltage	192~240vdc	
	Charging current	1-12A(max)	
Display interface		LCD display interface, support operation mode/load/power/input/output, etc.	
communication interface		Standard RS232 communication interface, EPO interface, optional SNMP smart card, USB interface	
Environment	Operating temperature	0~40	
	Operating Humidity	20%~95% non-condensing	
	Altitude	Should not exceed 1000m, derate above 1000m, with a maximum of 4000m, refer to IEC 62040.	
Dimensions	D×W×H(mm)	500×438×86.8	
Weight	Net weight(kg)	8.8	11

# LY-UR31 Series Rackmount UPS

## 10-20kVA



### Product Overview

Leayo LY-UR31 series UPS is a new generation of general-purpose UPS designed and manufactured by Leayo, with rack-mountable structure design, which can be installed in standard server cabinets, and adopts on-line, double-conversion architecture, which can provide better power environment for user loads.

### Power Range

10-20KVA

### Working Method

triple in single out



### Performance Characteristics

- On-line double conversion structure design, digital control technology.
- Liquid crystal display man-machine interface, intuitive display, easy to operate.
- Ultra-wide input voltage range, frequency self-adaptation, strong anti-grid disturbance ability.
- Pure sine wave output, stable and reliable performance.
- Energy efficient, 95.5% efficiency of the whole machine.
- Strong load carrying capacity, output power factor 1.0.
- Input over/under voltage, output short circuit, over temperature and other multiple protection functions.

### Application Fields

The products are widely used in government, finance, radio and television, education, health care, small and medium-sized enterprises and other units of IT class load equipment.



### Detailed parameters

Model LY-UR	3110	3115	3120
Phase	Three-input Single-output		
Capacity	10kVA/10kW	15kVA/15kW	20kVA/20kW
Input			
Rated voltage	380Vac (Three-phase, four-wire system with a ground wire)		
Voltage range	Phase voltage: 110 - 300VAC Line Voltage: 190~520VAC		
Frequency range	44~56Hz @50Hz/54Hz~66Hz @60Hz		
Power factor	0.99 @ 100%load  (60% - 120%) * 220Vac, can be set via software		
Output			
Output Power Factor	0.8 @ 16 - 17 cells, 0.9 @ 18 - 19 cells, 1.0 @ 20 cells		
Rated voltage	220Vac		
Voltage range (Battery mode)	± 1%		
Frequency range (Synchronize correction range)	50Hz: (44 - 56)Hz, tracking; 60Hz: (54 - 66)Hz, tracking		
Frequency range (Battery mode)	50 HZ ± 0.1 HZ		
Current Crest Ratio	3:1		
THD	≤3% (Linear Load) ; ≤ 5% (Non-linear Load)		
Switching time	Mains Mode → Battery Mode: 0ms		
Waveform (Battery mode)	Pure Sine Wave		
Overload capacity	Mains: 102% < Load ≤ 110%, switch to bypass mode and issue warning after 30 minutes; 110% < Load ≤ 130%, switch to bypass mode and issue warning after 10 minutes; 130% < Load ≤ 150%, switch to bypass mode and issue warning after 60 seconds; Load > 150%, switch to bypass mode and issue warning after 300 milliseconds Battery: 102% < Load ≤ 110%, switch to bypass mode and issue warning after 10 minutes; 110% < Load ≤ 130%, switch to bypass mode and issue warning after 1 minute; 130% < Load ≤ 150%, switch to bypass mode and issue warning after 10 seconds; Load > 150%, switch to bypass mode and issue warning after 300 milliseconds		
Efficiency			
Mains Efficiency	≥ 95.5%		
ECO Efficiency	≥ 98.5%		
Battery	Battery voltage	192 - 240Vdc (factory default 192Vdc)	
	Number of battery cells	16-20 cells	
	Charging current	1 - 12A adjustable (factory default 5A @ long machine)	
Alarm sounds			
Battery mode	Rings every 4 seconds		
Low Battery Level	Rings every 1 second		
Overload	Rings every 1 second		
Failure	Continuous Alarm		
Net weight and Dimensions			
D × W × H (mm)	517 × 438 × 131(3U)		
Net weight (kg)	19	19	20
Environment			
Temperature and humidity	Relative humidity 20-90% and temperature 0-40° C (non-condensing)		
Noises	≤60dB at 1 meter		
Control management			
Communication and Monitoring Functions	RS232; Network Monitoring Card (optional); FPO (optional)		

# LY-UR33 Series Rackmount UPS

## 10-40kVA



### Product Overview

This series is based on double-conversion on-line rackmount UPS, adopting advanced high-tech technology as a new concept of power protection. This series is a green and energy-saving rackmount UPS based on double-conversion on-line UPS and adopts advanced high-tech technology as a new concept of power protection. Redundant design of key components, superior performance, the use of multi-mode process management and other international advanced technology, as well as a wealth of power management software, with reliable and efficient, intelligent and flexible features, is designed for financial, communications, insurance, transport, taxation, military, securities, energy, education, government, enterprises and other systems of the network computer room and small intelligent equipment (such as measuring devices, industrial automation equipment, etc.), Precision instruments and other high-performance sine wave on-line UPS, especially suitable for harsh power grid environment.

### Power Range

10-40kVA

### Working Method

triple in/out

### Product Characteristics

#### ▼ High reliability

- Ultra-wide input voltage range, adapt to the harsh grid environment.
- Wide input frequency range, can be connected to fuel generator.
- Support direct battery power-on without utility power.
- With EPO emergency shutdown interface.

#### ▼ High efficiency and green

- The efficiency of the whole machine is greater than or equal to 95.5%.
- Input power factor up to 0.99, input harmonic current less than 3%.

#### ▼ Practicality

- Super carrying capacity, load adaptability, compatible with generator operation.
- Support 4 parallel connection and shared battery pack.
- Supports no-load aging test.

#### ▼ Easy to use

- 4.3-inch colour touch screen, easy to operate.
- Intelligent management function, support RS485, SNMP, dry node, CAN interface.

### Application Fields

The products are widely applied to provide safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as telecommunication, finance, education, transport, broadcasting, medical care, manufacturing and so on.

### Detailed parameters

Model LY-UR	3310	3320	3330	3340
Rated capacity	10kVA	20kVA	30kVA	40kVA
Input	Configuration	Three-phase, five-wire		
	Rated input voltage	380/400/415Vac		
	Voltage range	138~485Vac		
	Frequency range	40Hz-70Hz		
	Input power factor	≥0.99		
	THDi	≤3%(100% Linear Load)		
	Bypass voltage range	220Vac upper limit: 25% (optional +10%, +15%, +20%) 230Vac upper limit: 20% (optional +10%, +15%) 240Vac upper limit: 15% (optional +10%) Lower limit: -45% (optional -10%, -20%, -30%)		
Generator Connection	Support			
Output	Configuration	Three-phase, five-wire		
	Rated output voltage	380/400/415Vac		
	Output power factor	0.9		
	Voltage accuracy	±1%		
	Frequency	Mains mode: Settable to ±1%, ±2%, ±4%, ±5%, or ±10% Battery mode: (50/60±0.1%)Hz		
	Current Crest Ratio	3:1		
	THDv	≤2% (100%Linear Load) ; ≤4% (100%Non-linear Load)		
	Overall efficiency	95.5%		
	Overload capacity	At 110% load :After 60 minutes , switch to bypass mode; At 125% load :After 10 minutes , switch to bypass mode; At 150% load :After 1 minute , switch to bypass mode		
Battery	Battery voltage	±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (option from 30 to 50 cells)		
	Charging current	Max 10A		
Switching time	Mains Mode → Bypass Mode: 0ms(tracking); Mains Mode → Battery Mode:0ms			
Environment	Operating temperature	0°C~40°C		
	Storage temperature	-25°C~55°C		
	Operating humidity	0~95% (non-condensing)		
	Altitude	< 1500 meters		
Noises (1 meter)	<55dB			
Function	Alarm	Multiple alarm functions for overload, mains power failure, UPS failure, battery undervoltage, and etc.		
	Protection	Battery undervoltage, output overvoltage/undervoltage, short circuit, overload, overtemperature, fan failure alarm, and lightning protection ng protection		
	communication interface	supports CAN, RS485, FE , LBS , parallel operation cards, SNMP adapters (optional), and relay cards (optional)		
Other	Dimensions D×W×H (mm)	770×438×130(3U)		
	Net weight (kg)	24.2	24.2	27
Execution standard	YD/T 1095-2018			

# LY-UT11 Series Tower UPS

## 1-3kVA



### Power Range Working Method

1-3kVA single in, single out

### Product Characteristics

#### ▼ The bypass protection

- bypass power supply function makes the UPS emergency handling ability greatly strengthened, so that the user's load equipment from the danger of power failure.

#### ▼ Pure Sine Wave Output

- Adopting on-line double conversion architecture and digital control technology, the pure sine wave output can be used with various types of loads, providing the best power protection for the user's load equipment.

#### ▼ Zero conversion time

- Zero switching time between utility mode and battery mode when the utility power goes out and comes back on, which effectively ensures the reliability of load operation.

#### ▼ Green Power Design

- The input power factor is up to 0.99, which reduces the pollution to the power grid and meets the design concept of green power supply.

#### ▼ Auto-start function

- When the utility power is interrupted and then restored, the UPS will automatically start up, no need to manually start up the UPS again, realising the function of unattended operation.

#### ▼ Intelligent Battery Management

- Adopting multi-stage battery charge management technology, it has powerful charging capability and supports the configuration of large capacity battery packs.

#### ▼ Available with generator

- With a wide range of input voltage and frequency, UT11 series can be used with branded generators to provide pure, safe and stable power supply to the load.

### Product Overview

Leayo LY-UT11 series UPS is a new generation of general-purpose UPS designed and manufactured by Leayo, which is compatible with tower or rack mounting, and adopts on-line, double-conversion architecture design, which is able to provide better power environment for the user loads compared with on-line interactive or backup UPS models.

The product is widely used in government, finance, education, small and medium enterprises and other units of IT load equipment.

### Application Fields

Suitable for office, communications, data room environments or other confined spaces.

### Performance Characteristics

- On-line double conversion design, microprocessor control technology.
- Liquid crystal display, convenient operation and maintenance.
- Wide input voltage (110Vac to 300Vac), adapting to suboptimal grid environment.
- Input power factor  $\geq 0.99$ , green power design.
- Output power factor 1, strong load carrying capacity.
- Utility mode efficiency up to 94%, high efficiency and energy saving.
- Long-lasting model charging current up to 12A, multi-stage intelligent charging management.
- Under-voltage, over-voltage, short-circuit, over-temperature protection and other perfect protection mechanism.
- Standard RS232 interface, optional SNMP card, USB port.

### Detailed parameters

Model	LY-UT11	1101S	1101	1102S	1102	1103S	1103
Capacity/Power	1kVA/1kW		2kVA/2kW		3kVA/3kW		
Input	Input Configuration	L+N+PE					
	Rated input voltage	208/220/230/240VAC					
	Voltage range	110~300VAC					
	Frequency range	44~56Hz or 54Hz~66Hz , Default					
	Input power factor	$\geq 0.99$					
	THDi	$\leq 4\%$ (Linear Load) $\leq 5\%$ (Non-linear Load PF=0.8)					
Output	Output Configuration	L+N+PE					
	Output voltage	208/220/230/240VAC					
	Output accuracy	$\pm 1\%$					
	Output frequency	Online Mode: Follow the mains frequency, Battery mode :50/60Hz $\pm 0.1\%$					
	THD	$\leq 3\%$ (Linear Load) $\leq 5\%$ (Non-linear Load)					
	Output power factor	1					
	Switching time	Mains mode $\rightarrow$ Battery mode : 0ms , Inverter mode - Bypass mode: 4ms					
	Overload capacity	Mains mode:30min@102%~110% Load; 10min@110%~130% Load; 30s@130%~150%Load; 200ms@>150% Load Battery mode:1min@102%~110% Load; 10s@110%~130% Load; 3s@130%~150% Load; 200ms@>150% Load					
Efficiency (Mains Mode)	94.5%		95.5%		95.5		
Battery	Battery voltage	Built-in 2 $\times$ 12V 7AH/9AH battery	36Vdc	Built-in 4 $\times$ 12V 7AH/9AH battery	72Vdc	Built-in 6 $\times$ 12V 7AH/9AH battery	96Vdc
	Charging current	1A	1-12A(max)	1A	1-12A(max)	1A	1-12A(max)
Display interface	LCD display interface, support operation mode/load/power/input/output, etc.						
communication interface	RS232 as standard, optional SNMP smart card and USB interface						
Environment	Operating temperature	0~40 $^{\circ}$ C					
	Operating Humidity	20%~95% non-condensing					
	Altitude	Should not exceed 1000m, derate above 1000m, with a maximum of 4000m, refer to IEC 62040.					
Dimensions	D $\times$ W $\times$ H(mm)	315 $\times$ 145 $\times$ 219		400 $\times$ 145 $\times$ 219		454 $\times$ 190 $\times$ 322	400 $\times$ 145 $\times$ 219
Weight	Net weight(kg)	8.6/9.6	4	15.4/17.4	6.2	21/24	6.4

# LY-UT11 Series Tower UPS

## 6-10kVA



### Power Range

6-10kVA

### Working Method

single in, single out

## Product Characteristics

### ▼ The bypass protection

- bypass power supply function makes the UPS emergency handling ability greatly strengthened, so that the user's load equipment from the danger of power failure.

### ▼ Pure Sine Wave Output

- Adopting on-line double conversion architecture and digital control technology, the pure sine wave output can be used with various types of loads, providing the best power protection for the user's load equipment.

### ▼ Zero conversion time

- Zero switching time between utility mode and battery mode when the utility power goes out and comes back on, which effectively ensures the reliability of load operation.

### ▼ Green Power Design

- The input power factor is up to 0.99, which reduces the pollution to the power grid and meets the design concept of green power supply.

### ▼ Auto-start function

- When the utility power is interrupted and then restored, the UPS will automatically start up, no need to manually start up the UPS again, realising the function of unattended operation.

### ▼ Intelligent Battery Management

- Adopting multi-stage battery charge management technology, it has powerful charging capability and supports the configuration of large capacity battery packs.

### ▼ Available with generator

- With a wide range of input voltage and frequency, UT11 series can be used with branded generators to provide pure, safe and stable power supply to the load.

## Product Overview

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The product is widely used in government, finance, education, small and medium enterprises and other units of IT load equipment.

## Application Fields

Suitable for office, communications, data room environments or other confined spaces.

## Performance Characteristics

- On-line double conversion design, microprocessor control technology.
- Liquid crystal display, convenient operation and maintenance.
- Wide input voltage (110Vac to 300Vac), adapting to suboptimal grid environment.
- Input power factor  $\geq 0.99$ , green power design.
- Output power factor 1, strong load carrying capacity.
- Utility mode efficiency up to 95%, high efficiency and energy saving
- Long-lasting model charging current up to 12A, multi-stage intelligent charging management.
- Under-voltage, over-voltage, short-circuit, over-temperature protection and other perfect protection mechanism.
- Standard RS232 interface, optional SNMP card, USB port.

## Detailed parameters

Model LY-UT		LY-UT1106S	LY-UT1106	LY-UT1110S	LY-UT1110
Capacity/Power		6kVA/6kW		10kVA/10kW	
Input	Input Configuration	L+N+PE			
	Rated input voltage	208/220/230/240VAC			
	Voltage range	110~300VAC			
	Frequency range	44~56Hz or 54Hz~66Hz			
	Input power factor	$\geq 0.99$			
Output	Output Configuration	L+N+PE			
	Output voltage	208/220/230/240VAC			
	Output accuracy	$\pm 1\%$			
	Output frequency	Online Mode: Follow the mains frequency, Battery mode:50/60Hz $\pm 0.1\%$			
	THD	$\leq 2\%$ (Linear Load) $\leq 5\%$ (Non-linear Load)			
	Output power factor	1			
	Switching time	0ms			
	Overload capacity	Mains mode:30min@102%~110% Load; 10min@110%~130% Load; 30s@130%~150%Load; 200ms@>150% Load Battery mode:10min@102%~110% Load; 1min@110%~130% Load; 10s@130%~150% Load; 200ms@>150% Load			
Efficiency (Mains Mode)		95%			
Battery	Battery voltage	Built-in 16×12V 7AH/9AH battery	192~240vdc	Built-in 16×12V 7AH/9AH battery	192~240vdc
	Charging current	1A	1-12A(max)	1A	1-12A(max)
Display interface		LCD display interface, support operation mode/load/power/input/output, etc.			
Communication interface		Standard RS232 communication interface, EPO interface, optional SNMP smart card, USB interface			
Environment	Operating temperature	0~40°C			
	Operating Humidity	20%~95% non-condensing			
	Altitude	Should not exceed 1000m, derate above 1000m, with a maximum of 4000m, refer to IEC 62040.			
Dimensions	D×W×H(mm)	454×190×700	454×190×322	454×190×700	454×190×322
Weight	Net weight(kg)	53.2/61.2	9.8	54.6/62.6	11.2

# LY-UT31 Series Tower UPS

## 10-20kVA



### Product Overview

Leayo LY-UR31 series UPS is a new generation of general-purpose UPS designed and manufactured by Leayo, with rack-mountable structure design, which can be installed in standard server cabinets, and adopts on-line, double-conversion architecture, which can provide better power environment for user loads.

### Application Fields

The products are widely used in government, finance, radio and television, education, health care, small and medium-sized enterprises and other units of IT class load equipment.

### Power Range

10-20KVA

### Technical features

- On-line double conversion structure design, digital control technology.
- Liquid crystal display man-machine interface, intuitive display, easy to operate.
- Ultra-wide input voltage range, frequency self-adaptation, strong anti-grid disturbance ability.
- Pure sine wave output, stable and reliable performance.
- Energy efficient, 95.5% efficiency of the whole machine.
- Strong load-carrying capacity, output power factor 1.0.
- Multiple protection functions such as input over/under voltage, output short circuit and over temperature.

### Working Method

triple in single out

### Detailed parameters

Model LY-UT	3110	3115	3120
Phase	Three-input Single-output		
Capacity	10kVA/10kW	15kVA/15kW	20kVA/20kW
Input			
Rated voltage	380Vac(Three-phase, four-wire system with a ground wire)		
Voltage range	Phase voltage: 110 - 300VAC Line Voltage:190~520VAC		
Frequency range	44~56Hz @50Hz/54Hz~66Hz @60Hz		
Power factor	0.99 @ 100% load		
Bypass Voltage	(60% - 120%) * 220Vac, can be set via software		
Output			
Output Power Factor	0.8 @ 16 - 17 cells, 0.9 @ 18 - 19 cells, 1.0 @ 20 cells		
Rated voltage	220Vac		
Voltage range (Battery mode)	± 1%		
Frequency range (Synchronize correction range)	50Hz: (44 - 56)Hz, tracking; 60Hz: (54 - 66)Hz, tracking		
Frequency range (Battery mode)	50 HZ ± 0.1 HZ		
Current Crest Ratio	3:1		
THD	≤3% (Linear Load) ; ≤5% (Non-linear Load)		
Switching Time	Mains mode → Battery mode	0	
Waveform (Battery mode)	Pure Sine Wave		
Overload capacity	Mains: 102% < Load ≤ 110%, switch to bypass mode and issue warning after 30 minutes; 110% < Load ≤ 130%, switch to bypass mode and issue warning after 10 minutes; 130% < Load ≤ 150%, switch to bypass mode and issue warning after 60 seconds; Load > 150%, switch to bypass mode and issue warning after 300 milliseconds Battery: 102% < Load ≤ 110%, switch to bypass mode and issue warning after 10 minutes; 110% < Load ≤ 130%, switch to bypass mode and issue warning after 1 minute; 130% < Load ≤ 150%, switch to bypass mode and issue warning after 10 seconds; Load > 150%, switch to bypass mode and issue warning after 300 milliseconds		
Efficiency			
Mains Efficiency	≥ 95.5%		
ECO Efficiency	≥ 98.5%		
Battery	Battery voltage	192 - 240Vdc (factory default 192Vdc)	
	Number of battery cells	16-20 cells	
	Charging current	1 - 12A adjustable (factory default 5A @ long machine)	
Alarm sounds			
Battery mode	Rings every 4 seconds		
Low Battery Level	Rings every 1 second		
Overload	Rings every 1 second		
Failure	Continuous Alarm		
Dimensions and Net weight			
Dimensions : D x W x H ( mm)	490 x 190 x 700		
Net weight (kg)	24	24	25
Environment			
Temperature and humidity	Relative humidity 20-90% and temperature 0-40° C (non-condensing)		
Noises	≤60dB@1meter		
Control management			
Communication and Monitoring Functions	RS232; Network Monitoring Card (optional); EPO (optional)		

# LY-UT33Series Tower UPS

## 10-80kVA



### Product Overview

LY-UT33 series 10-80kVA fully digitally controlled on-line double conversion triple inlet and triple outlet UPS has the advantages of high efficiency of the whole machine, high input power factor, low input current harmonics and excellent output quality, which can eliminate all kinds of power grid problems and provide customers with stable and reliable power protection.

### Application Fields

This product has a wide range of applications, providing safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as electric power, manufacturing, petrochemicals, transport, medical care, finance and so on.

### Power Range

10-80kVA

### Working Method

triple in/out

### Product Characteristics

#### ▼ High reliability

- Ultra-wide input voltage range, adapt to the harsh grid environment.
- Wide input frequency range, can be connected to fuel generator.
- Support direct battery power-on without utility power.
- With EPO emergency shutdown interface.

#### ▼ High efficiency

- The efficiency of the whole machine is greater than or equal to 95.5%.
- Input power factor up to 0.99, input harmonic current less than 3%.

#### ▼ Practicality

- Super carrying capacity, load adaptability, compatible with generator operation.
- Support 4 parallel connection and shared battery pack.
- Supports no-load aging test.

#### ▼ Easy to operate

- 4.3-inch colour touch screen, easy to operate.
- Intelligent management function, support RS485, SNMP, dry node, CAN interface.

### Detailed parameters

Model LY-UT		3310	3320	3330	3340	3360	3380
Rated capacity(kVA)		10	20	30	40	60	80
Input	Configuration	Three-phase, five-wire					
	Rated input voltage	380/400/415Vac					
	Voltage range	138~485Vac					
	Frequency range	40Hz-70Hz					
	Input power factor	≥0.99					
	THDi	≤3%(100% Linear Load)					
	Bypass voltage range	220Vac upper limit: 25% ( optional+10%, +15%, +20%) 230Vac Upper limit: 20% (optional+10%, +15% ) 240Vac Upper limit: 15% (optional +10%) Lower limit: -45% (optional -10%, -20%, -30%)					
	Generator Connection	Support					
Output	Configuration	Three-phase, five-wire					
	Rated output voltage	380/400/415Vac					
	Output power factor	0.9					
	Voltage accuracy	±1%					
	Frequency	Mains mode : Settable to ±1%/±2%/±4%/±5%±10%; Battery mode: (50/60±0.1%)Hz					
	Current Crest Ratio	3:1					
	THDv	≤2% (100%Linear Load) ; ≤4% (100%Non-linear Load)					
	Overall efficiency	95.5%					
	Overload capacity	At 110% load :After 60 minutes , switch to bypass mode; At 125% load :After 10 minutes , switch to bypass mode; At 150% load :After 1 minute , switch to bypass mode					
	Battery	Battery voltage	±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)				
Charging current(A)		Up to 10			Up to 15		Up to 20
Switching time		Mains mode → Bypass mode : 0ms(tracking); Mains mode → Battery mode:0ms					
Environment	Operating temperature	0°C~40°C					
	Storage temperature	-25°C~55°C					
	Operating humidity	0~95% (Non-condensing)					
	Altitude	< 1500 meters					
	Noises(dB) (1 meter)	<55			<58		<60
Function	Alarm	Multiple alarm functions for overload, mains power failure, UPS failure, battery undervoltage, and etc.					
	Protection	Battery undervoltage, output overvoltage/undervoltage, short circuit, overload, overtemperature, fan failure alarm, and lightning protection					
	communication interface	supports CAN, RS485, FE , LBS , parallel operation cards, SNMP adapters (optional), and relay cards (optional)					
Other	Dimensions: D×W×H(mm)	710x250x535	780x280x600			880x280x880	885x480x1200
	Net weight(kg)	32	36.4	39.4	41	68.2	142
Execution Standard		YD/T 1095-2018					

# LY-UT33 Series Tower UPS

## 100-180kVA



### Product Overview

LY-UT33 series 100-180kVA fully digitally controlled on-line double conversion triple inlet and triple outlet UPS has the advantages of high efficiency of the whole machine, high input power factor, low input current harmonics and excellent output quality, which can eliminate all kinds of power grid problems and provide customers with stable and reliable power protection.

### Application Fields

The products are widely applied to provide safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as telecommunication, finance, education, transport, broadcasting, medical care, manufacturing and so on.

### Power Range Working Method

100-180KVA

triple in/out

### Technical features

- Ultra-wide input voltage range, adapt to the harsh grid environment.
- Wide input frequency range, can be connected to fuel generator.
- The efficiency of the whole machine is greater than or equal to 95.5%.
- Input power factor is up to 0.99, input harmonic current is less than 3%.
- Super load carrying capacity, strong load adaptability, compatible with generator operation.
- Support no-load aging test.
- Support 4 parallel and shared battery packs.
- Support generator.
- 4.3-inch colour touch screen, easy to operate.
- Intelligent management functions, support RS485, SNMP, dry node, CAN interface.

### Detailed parameters

Model LY-UT	33100	33120	33160	33180
Rated capacity	100kVA	120kVA	160kVA	180kVA
Input	Configuration	Three-phase, five-wire		
	Rated input voltage	380/400/415Vac		
	Voltage range	138~485Vac		
	Frequency range	40Hz-70Hz		
	Input power factor	≥0.99		
	THDi	≤3%(100% Linear Load)		
	Bypass voltage range	220Vac upper limit: 25% ( optional+10%, +15%, +20%) 230Vac Upper limit: 20% (optional+10%, +15%) 240Vac Upper limit: 15% (optional +10%) Lower limit: -45% (optional -10%, -20%, -30%)		
	Generator Connection	support		
Output	Configuration	Three-phase, five-wire		
	Rated Output voltage	380/400/415Vac		
	Output power factor	0.9		
	Voltage accuracy	±1%		
	Frequency	Mains mode: Settable to ±1%/±2%/±4%/±5%±10% ; Battery mode: (50/60±0.1%)Hz		
	Current Crest Ratio	3:1		
	THDV	≤2% (100%Linear Load) ; ≤4% (100%Non-linear Load)		
	Overall efficiency	95.5%		
Battery	Overload capacity	At 110% load :After 60 minutes , switch to bypass mode; At 125% load :After 10 minutes , switch to bypass mode; At 150% load :After 1 minute , switch to bypass mode		
	Battery voltage	±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)		
	Charging current	Up to 30A	Up to 45A	
	Switching time	Mains mode → Bypass mode : 0ms(tracking); Mains mode → Battery mode:0ms		
Environment	Operating temperature	0°C~40°C		
	Storage temperature	-25°C~55°C		
	Operating humidity	0~95% (non-condensing)		
	Altitude	< 1500 meters		
	Noises (1 meter)	<60dB	<65dB	
Function	Alarm function	Multiple alarm functions for overload, mains power failure, UPS failure, battery undervoltage, and etc.		
	Protection function	battery undervoltage, output overvoltage/undervoltage, short circuit, overload, overtemperature, fan failure alarm, and lightning protection ng protection		
	communication interface	supports CAN, RS485, FE, LBS (Location Based Services or another specific service depending on context), parallel operation cards, SNMP adapters (optional), and relay cards (optional)		
Other	Dimensions: DXWXH( mm)	885×480×1200		
	Net weight (kg)	145	149	195
	Execution Standard	YD/T 1095-2018		

# LY-UT33 Series Tower UPS

## 200-600kVA



### Power Range

200-600kVA

### Working Method

triple in/out

### Product Characteristics

#### ▼ High reliability

- 138~485Vac ultra-wide input voltage range, ultra-wide input frequency range, adapt to the harsh grid environment.
- LBS synchronisation function can synchronise two sets of UPS to improve system reliability.

#### ▼ Efficient and energy-saving

- Adopting three-level topology, the efficiency of the whole machine is up to 95.5%.
- Input power factor as high as 0.99, input harmonic current less than 3%.

#### ▼ High availability

- Super strong load carrying capacity, can carry 100% unbalanced load, strong load adaptability, compatible with generator line.
- Support 6 parallel and common battery packs, the number of battery sections 30~50 optional.
- Support no-load aging test.

#### ▼ User-friendly

- 7-inch colour touch screen, graphic display, easy to operate.
- Intelligent management function, support RS485, SNMP, dry node, CAN interface.

### Product Overview

LY-UT33 series 200-600kVA fully digitally controlled on-line double conversion triple inlet and triple outlet UPS has the advantages of high efficiency of the whole machine, high input power factor, low input current harmonics and excellent output quality, which can eliminate all kinds of power grid problems and provide customers with stable and reliable power protection.

### Application Fields

IDC server rooms, large and medium-sized data centres, financial centres, large corporate data centres, etc.

### Detailed parameters

Model LY-UT		33200	33300	33400	33500	33600	
Rated capacity(kVA)		200	300	400	500	600	
Input	Configuration	Three-phase, five-wire					
	Rated input voltage(Vac)	380/400/415					
	Voltage range(Vac)	138~485					
	Frequency range(Hz)	40Hz-70					
	Input power factor	≥0.99					
	THDi	≤3%(100% Linear Load)					
	Bypass voltage range	220Vac upper limit: 25% ( optional+10%, +15%, +20%) 230Vac Upper limit: 20% (optional+10%, +15% ) 240Vac Upper limit: 15% (optional +10%) Lower limit: -45% (optional -10%, -20%, -30%)					
	Generator Connection	support					
Output	Configuration	Three-phase, five-wire					
	Rated output voltage(Vac)	380/400/415					
	Output power factor	0.9					
	Voltage accuracy	±1%					
	Frequency	Mains mode	Settable to ±1%/±2%/±4%/±5%±10%				
		Battery mode	(50/60±0.1%)Hz				
	Current Crest Ratio	3:1					
	THDV	≤2% (100%Linear Load); ≤4% (100%Non-linear Load)					
	Overall efficiency	95.50%					
	Overload capacity	At 110% load :After 60 minutes , switch to bypass mode; At 125% load :After 10 minutes , switch to bypass mode; At 150% load :After 1 minute , switch to bypass mode					
Battery	Battery voltage	±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)					
Switching time		Mains mode → Bypass mode 0ms(tracking); Mains mode → Battery mode:0ms					
Function	Alarm function	Multiple alarm functions for overload, mains power failure, UPS failure, battery undervoltage, and etc.					
	Protection function	Battery undervoltage, output overvoltage/undervoltage, short circuit, overload, overtemperature, fan failure alarm, and lightning protection					
communication interface		supports CAN, RS485, FE , LBS , parallel operation cards, SNMP adapters (optional), and relay cards (optional)					
Environment	Operating temperature	0°C~40°C					
	Storage temperature	-25°C~55°C					
	Operating humidity	0~ 95% (Non-condensing)					
	Altitude(m)	< 1500 meters					
	Noises(dB) (1 meter distance)	<65	<68	<70	<70	<70	
Other	Dimensions: D x Wx H(mm)	850x600x2000			850x1200x2000		
	Net weight(Kg)	314	425	493	679	733	
Execution Standard		YD/T 1095-2018					

# LY-UT(P) Series on-line UPS

## 10-600kVA



### Product Overview

LY-UT33(P) three-in-three-out industrial frequency double conversion on-line UPS power supply is a new type of energy-saving and environmentally friendly green power supply products developed by combining the company's many years of experience in designing the UPS industry. This series of products adopts highly reliable all-digital processing technology, intelligent human-computer interface, and a powerful intelligent network management function. It provides perfect power protection solutions to solve power problems such as power failure, utility high voltage, utility low voltage, voltage transient drop, amplitude reduction oscillation, high voltage pulse, surge voltage, harmonic distortion, clutter interference, frequency fluctuation, etc. It provides reliable power protection for today's telecom, finance, transport, government, manufacturing, energy and various industrial automation equipment.

### Application Fields

This product has a wide range of applications, providing safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as electric power, manufacturing, petrochemicals, transport, medical care, finance and so on.

### Power Range Working Method

10-600kVA

triple in/out

### Technical features

- Adopting DSP digital control technology to realise real-time control, parameter setting, operation program management, self-test and self-detection, etc., which can detect and protect all independent circuit connections on the circuit board.
- Standard LCD touch screen as the host display interface, the display content can be set in Chinese/English selection, running status, operating procedures, data collection, fault detection information and other content at a glance.
- According to the load characteristics of the customer site can be set through the UPS host LCD control panel in the ECO energy-saving mode, once the detection of the decline in the quality of utility power supply, the UPS will be switched to the inverter with load. In ECO energy saving mode, the efficiency of the UPS is up to 98% or more.
- Flexible parallel technology is applicable to different loads and systems, and can be used for single 1+1 parallel operation or multiple (N+X) redundant parallel operation, providing comprehensive and reliable protection for important loads.
- If you want to start the UPS emergency power supply when there is no utility power input, you need to press the small DC start button switch on the cabinet to start the UPS power supply to the load.
- Standard RS232/RS485/USB communication ports and a variety of dry contact signal interfaces as well as expandable intelligent slots to truly realise multi-purpose communication and remote monitoring.

### 6-Pulse Configuration Parameters

Model LY-UT33	10P	15P	20P	30P	40P	60P	80P	100P	120P	160P	200P	250P	300P	400P										
Rated capacity (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300	400										
Input																								
Voltage	380Vac(380-400-415V settable through the LCD panel)																							
Voltage range	±25%																							
Frequency	40-70Hz (Automatically detects and adapts to 50/60Hz frequency systems)																							
Startup time	Soft startup time is 10S~30S (settable)																							
DC voltage																								
DC voltage	384V (The Number of battery cells can be set through the LCD panel, adjustable from 29 to 32 cells)																							
Float voltage	432V																							
Discharge cut-off voltage	336V (Based on the installed Number of battery cells, the battery undervoltage protection voltage can be set through the UPS panel)																							
Output																								
Power factor (PF)	0.8																							
Phase voltage regulation range	L-L: 380Vac																							
Voltage stability	±1%																							
Transient response range	±4% (full load)																							
Crest Ratio	3:1																							
THD	<3%(Linear Load) , <5%(Non-linear Load)																							
Output frequency	Under normal mains power conditions, track the mains frequency; under abnormal mains power conditions, the output frequency from the battery inverter is 50Hz/60Hz (±0.2%)																							
Overload capacity	At 125% load :After 10 minutes , switch to bypass mode; At 150% load :After 1 minute , switch to bypass mode; Once the load returns to normal, automatically resume inverter operation																							
Switching time	Mains mode → Battery mode : 0ms , Inverter mode - Bypass mode: 4ms																							
Bypass parameters																								
Voltage range	400Vac ±15% (adjustable from ±10% to ±20% through the panel settings)																							
Frequency range	50/60Hz ±2% (adjustable from ±1% to 5% through the panel settings)																							
System parameters																								
Overall efficiency	Under full load, with the battery fully charged																							
ECO efficiency	98%																							
Physical parameters																								
Unit Dimensions (mm)																								
D	560			693			815			740			865			865			1115			1115		
W	370			430			430			810			1285			1430			1410			1610		
H	900			1161			1155			1405			1600			1600			2006			2006		
Unit Weight (Kg)	108	130	146	200	240	300	330	580	680	1080	1180	1280	1380	1680										
Ingress protection	IP20																							

## 12-Pulse Configuration Parameters

Model	LY-UT33	100 P12	120 P12	160 P12	200 P12	250P12	300P12	400P12	500P12	600P12	
Capacity		100kVA	120kVA	160kVA	200kVA	250kVA	300kVA	400kVA	500kVA	600kVA	
Input	Voltage range	380/400/415VAC (±25%, settable through the LCD panel)									
	Frequency range	40–70Hz automatically selects the synchronization range according to the grid frequency, and adapts to the 50/60Hz frequency system									
	Bypass synchronization tracking range	50Hz±5% (with an optional ±10% adjustment)									
	Number of rectified pulses	12 pulse rectification									
	Phase	3φ4W+PE (Three-phase, five-wire)									
	Battery voltage	384VDC							480VDC		
	Number of batteries	32 cells(can be set through the LCD panel, adjustable from 30 to 33 cells)							40 cells(can be set through the LCD panel, adjustable from 38 to 42 cells)		
Output	Power factor	0.8									
	Voltage	L–N: 220V±1% L–L: 380V±1%									
	Three-phase 100% load imbalance voltage stability	≤2%, allowing for complete(100%) imbalance									
	Frequency	Under normal mains power conditions, track the mains frequency; under abnormal mains power conditions, the output frequency is 50Hz±0.2%									
	Switching time	0 ms									
	Parallel operation mode (Parallel model)	8 units in parallel									
	THD	<3%(Linear Load) , <5%(Non-linear Load)									
	Overload capacity	At 125% load :After 10 minutes , switch to bypass mode; At 150% load :After 1 minute , switch to bypass mode; Once the load returns to normal, automatically resume inverter operation									
	Crest Ratio	>3:1									
	Manual maintenance bypass	Standard configuration includes a manual maintenance bypass switch without a switching time									
Communication	Provides dry contact signals and RS232/RS485 communication interfaces, with optional SNMP cards, WeChat managers, etc., for remote communication and management										
Panel display	LED displays work status and abnormal indicators; LCD displays three-phase input voltage, input frequency, three-phase output voltage, load, battery voltage, and battery charging/discharging current, etc.										
Display Method	LCD 7-inch color touch screen display										
Noises	<65dB(within 1 meter)										
Alarm function	Battery low voltage, mains power failure, overload, UPS Failure, over-temperature protection, etc.										
Protection function	Input over-voltage, under-voltage protection, battery under-voltage protection, overload protection, short circuit protection, over-temperature protection, etc.										
Cooling method	Forced air cooling										
Operating temperature(°C)	0~40										
Relative humidity	0~95% (Non-condensing)										
Dimensions: D×W×H (mm)	800×1100×1800			1113×1405×2005				1113×1605×2005		1200×2600×2000	
Weight(T)	0.89	1.08	1.28	1.38	1.48	1.68	2.08	2.35	2.65		

## LY-UM Rackmount Modular 10-200kVA



### Product Overview

The LY-UM series rack mount modular UPS can be installed as a tower model alone or in a standard 19-inch network cabinet. Adopting on-line double conversion technology, the LY-UM series can completely eliminate all kinds of power grid problems and provide customers with stable, pure sine power protection.

### Application Fields

This product has a wide range of applications, providing safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as electric power, manufacturing, petrochemicals, transport, medical care, finance and so on.

### Product Characteristics

#### ▼ High reliability

- Ultra-wide input voltage range, adapt to the harsh grid environment.
- Wide input frequency range, can be connected to fuel generator.
- Support direct battery power-on without utility power.
- With EPO emergency shutdown interface.

#### ▼ High efficiency

- The efficiency of the whole machine is greater than or equal to 95%.
- Input power factor up to 0.99, input harmonic current less than 3%.

#### ▼ Practicality

- Super carrying capacity, load adaptability, compatible with generator operation.
- Support 4 parallel connection and shared battery pack.
- Supports no-load aging test.

#### ▼ Easy to operate

- 4.3/7-inch colour touch screen, easy to operate.
- Intelligent management function, support RS485, SNMP, dry node, CAN interface.

## Performance parameters

Capacity		10-200kVA		
Input	Configuration		Three-phase, five-wire	
	Rated input voltage		380/400/415Vac	
	Voltage range		138~485Vac	
	Frequency range		40Hz-70Hz	
	Input power factor		≥0.99	
	THDi		≤3%(100% Linear Load)	
	Bypass voltage range		220Vac upper limit: 25% ( optional+10%, +15%, +20% ) ; 230Vac Upper limit: 20% ( optional+10%, +15% ) ; 240Vac Upper limit: 15% ( optional +10% ) ; Lower limit: -45% ( optional -10%, -20%, -30% ) Frequency protection range :±10%	
	Generator Connection		support	
	Output	Configuration		Three-phase, five-wire
Rated output voltage		380/400/415Vac		
Output power factor		0.9 or 1		
Voltage accuracy		±1%		
Frequency		Mains mode	Settable to ±1%, ±2%, ±4%, ±5%, ±10%	
		Battery mode	(50/60±0.1%)Hz	
Current Crest Ratio		3:1		
THDV		≤2% (100%Linear Load) ; ≤4% (100%Non-linear Load)		
Overall efficiency		96%		
Overload capacity		At 110% load :After 60 minutes , switch to bypass mode; At 125% load :After 10 minutes , switch to bypass mode; At 150% load :After 1 minute , switch to bypass mode		
Battery	Battery voltage		±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)	
	Charging current	Cabinets	2 slots at 20A / 4 slots at 40A / 6 slots at 60A	
		Module	10A max	
Switching time		Mains mode → Bypass mode 0ms(tracking); Mains mode → Battery mode:0ms		
Function	Alarm function	Multiple alarm functions for overload, mains power failure, UPS failure, battery undervoltage, and etc.		
	Protection function	Battery undervoltage, output overvoltage/undervoltage, short circuit, overload, overtemperature, fan failure alarm, and lightning protection		
communication interface		supports CAN, RS485, FE, LBS , parallel operation cards, SNMP adapters (optional), and relay cards (optional)		
Environment	Operating temperature		0°C~40°C	
	Storage temperature		-25°C~55°C	
	Operating humidity		0~95% (non-condensing)	
	Altitude		< 1500 meters	

## Dimensions\weight parameters

Rack\Tower Compatible models	Cabinet Capacity	20\30kVA	40\60kVA	60\90\120\150kVA
	Max number of modules	2	4	6 (for 30kVA modules: 5 + 1 redundant)
	Compatible power modules	10\15kVA	10\15kVA	10\15\20\25\30kVA
	Cabinet Dimensions: D×W×H(mm)	750×545×649	750×545×827	750×545×1005
	Module Dimensions: D×W×H(mm)	620×440×86mm		
	Cabinet Weight(kg)	63	75	87
	Module Weight(kg)	10/15/20kVA:19 ; 25/30kVA:21.6		

Rack-only model	Cabinet Capacity	40\50\60\100kVA	80\100\120\200kVA	120\150kVA
	Max number of modules	2	4	6 (for 30kVA modules: 5 + 1 redundant)
	Compatible power modules	20\25\30\50kVA		20\25\30kVA
	Cabinet Dimensions: D×W×H(mm)	40\50\60kVA:835×485×356 100kVA:835×485×490	80\100\120kVA:835×485×535 200kVA:835×485×757	835×485×713
	Module Dimensions: D×W×H(mm)	20/25/30kVA: 620×440×86 50kVA: 620×440×131		
	Cabinet Weight(kg)	40\50\60kVA:44.5 100kVA:50	80\100\120kVA:53.5 200kVA:72.5	63.5
	Module Weight(kg)	20kVA:19 ; 25/30kVA:21.6; 50kVA:33		

# LY-UM Series Modular UPS

## 20-200kVA



### Product Features

#### ▼ Digital control

- All parts of the architecture of this series of UPS are digitally controlled, and all UPS performance indicators are excellent.

#### ▼ High power density modular design

- Single module capacity of 20KVA, all modules are 2U in height; UPS modules can be added and pulled out online.

#### ▼ 19-inch standard cabinet

- Adopting 19-inch standard cabinet appearance, beautiful and generous, can perfectly match the application environment of the server room.

#### ▼ N+X parallel redundancy

- When the number of redundant modules reaches two or more, the system availability reaches 99.999%, and the MTBF (Mean Time Between Failure) reaches more than 250,000 hours; it supports the parallel connection of 4 cabinets between cabinets, and the battery packs can be shared when the cabinets are connected.

#### ▼ Intelligent Battery Management

- The user can set the charging current, constant current, constant voltage and float charging modes can be automatically and smoothly switched, the number of batteries 30-50 optional.

#### ▼ LCD colour display

- Cabinet oversized LCD display with touch control function, bilingual Chinese/English optional.

#### ▼ Safe and convenient to maintain

- When an emergency occurs, it can be switched to the maintenance bypass power supply so that maintenance personnel can safely perform maintenance on-line; emergency shutdown can be performed by pressing the EPO button in an emergency; and it has a remote emergency shutdown (REPO) function.

#### ▼ Intelligent Management

- Centralised monitoring module with hot-swappable function, RS485 communication interface, optional installation of SNMP cards, relays, dry contact cards and other options.

### Product Overview

LY-UM series 20-200kVA three-in-three-out UPS power supply, the product adopts modular design and N + X parallel redundancy technology, the product capacity covers 20kVA to 200kVA between the various power segments, to facilitate the user's flexible configuration and gradual investment. This series of UPS can solve almost all the power problems, such as power failure, utility high voltage, utility low voltage, instantaneous voltage drop, amplitude reduction oscillation, high voltage pulse, voltage fluctuation, surge voltage, harmonic distortion, clutter interference, frequency fluctuation and other power problems.

### Application Fields

This product has a wide range of applications, providing safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as electric power, manufacturing, petrochemicals, transport, medical care, finance and so on.

### Detailed parameters

Model LY-UM		20-60	20-100	20-120	20-200	
Capacity	Cabinet Capacity(kVA)	20-60	20-100	20-120	20-200	
	Power modules(kVA)	20				
Input	Configuration	Three-phase, four-wire system with a ground wire				
	Rated voltage(Vac)	380/400V/415				
	Voltage range(Vac)	208~478				
	Frequency range(Hz)	40~70				
	Power factor	≥0.99				
	Bypass voltage range	380Vac upper limit: 25% ( optional+10%, +15%, +20% ) ; 400Vac Upper limit: 20% (optional+10%, +15% ) ; 415Vac Upper limit: 15% (optional +10%); Lower limit: -45% (optional -20%, -30%)				
Output	THDi	≤3% (100%Non-linear Load)				
	Configuration	Three-phase, four-wire system with a ground wire				
	Rated voltage(Vac)	380/400V/415				
	Power factor	1				
	Voltage accuracy	±1%				
	Output frequency	Mains mode	Synchronized with the input frequency; When the utility frequency exceeds the maximum ±10% (adjustable to ±1%, ±2%, ±4%, ±5%), the output frequency is 50 × (±0.2%) Hz			
	Battery mode	(50/60±0.2%)Hz				
Output	Crest Ratio	3: 1				
	Switching time	Mains mode → Bypass mode 0ms(tracking); Mains mode → Battery mode:0ms				
	Overload capacity	At 110% load :After 60 minutes , switch to bypass mode ; At 125% load :After 10 minutes , switch to bypass mode ; At 150% load :After 1 minute , switch to bypass mode; above 150%, immediately switch to bypass mode				
	THDV	≤2%(100%Linear Load); ≤5%(100%Non-linear Load)				
	Efficiency	96%				
Communication interface		supports RS232, RS485, 2 intelligent slots and dry contact				
Battery	Battery voltage	±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)				
	Charging current(A)	Cabinets	30 max	50 max	60 max	100 max
		Module	10 max			
Environment	Operating temperature	0°C~40°C				
	Relative humidity	0~ 95%(Non-condensing)				
	Storage temperature	-25°C~55°C				
	Altitude	< 1500 meters				
Physical parameters	Dimensions: D×W×H (mm)	Cabinets	850x600x1350	850x600x1350	850x600x1350	850x600x2000
		Module	620x440x86			
	Net weight(Kg)	Cabinets	158	158	158	245
		Module	19			

# LY-UM Series Modular UPS

## 25-250kVA



### Product Features

#### ▼ Digital control

- All parts of the architecture of this series of UPS are digitally controlled, and all UPS performance indicators are excellent.

#### ▼ High power density modular design

- Single module capacity of 20KVA, all modules are 2U in height; UPS modules can be added and pulled out online.

#### ▼ 19-inch standard cabinet

- Adopting 19-inch standard cabinet appearance, beautiful and generous, can perfectly match the application environment of the server room.

#### ▼ N+X parallel redundancy

- When the number of redundant modules reaches two or more, the system availability reaches 99.999%, and the MTBF (Mean Time Between Failure) reaches more than 250,000 hours; it supports the parallel connection of 4 cabinets between cabinets, and the battery packs can be shared when the cabinets are connected.

#### ▼ Intelligent Battery Management

- The user can set the charging current, constant current, constant voltage and float charging modes can be automatically and smoothly switched, the number of batteries 30-50 optional.

#### ▼ LCD colour display

- Cabinet oversized LCD display with touch control function, bilingual Chinese/English optional.

#### ▼ Safe and convenient to maintain

- When an emergency occurs, it can be switched to the maintenance bypass power supply so that maintenance personnel can safely perform maintenance on-line; emergency shutdown can be performed by pressing the EPO button in an emergency; and it has a remote emergency shutdown (REPO) function.

#### ▼ Intelligent Management

- Centralised monitoring module with hot-swappable function, RS485 communication interface, optional installation of SNMP cards, relays, dry contact cards and other options.

### Product Overview

LY-UM series 25-250kVA three-in-three-out UPS power supply, the product adopts modular design and N + X parallel redundancy technology, the product capacity covers 25kVA to 250kVA between the various power segments, to facilitate the user's flexible configuration and gradual investment. This series of UPS can solve almost all the power problems, such as power failure, utility high voltage, utility low voltage, instantaneous voltage drop, amplitude reduction oscillation, high voltage pulse, voltage fluctuation, surge voltage, harmonic distortion, clutter interference, frequency fluctuation and other power problems.

### Application Fields

This product has a wide range of applications, providing safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as electric power, manufacturing, petrochemicals, transport, medical care, finance and so on.

### Detailed parameters

Model LY-UM		25-75	25-125	25-150	25-250	
Capacity	Cabinet Capacity(kVA)	25-75	25-125	25-150	25-250	
	Power Module(kVA)	25				
Input	Configuration	Three-phase, four-wire system with a ground wire				
	Rated voltage(Vac)	380/400V/415				
	Voltage range(Vac)	208~478				
	Frequency range(Hz)	40~70				
	Power factor	≥0.99				
	Bypass voltage range	380Vac upper limit: 25% ( optional+10%, +15%, +20% ) ; 400Vac Upper limit: 20% (optional+10%, +15% ) ; 415Vac Upper limit: 15% (optional +10%); Lower limit: -45% (optional -20%, -30%) Frequency protection range : ±10%				
	THDi	≤3% (100%Non-linear Load)				
Output	Configuration	Three-phase, four-wire system with a ground wire				
	Rated voltage(Vac)	380/400V/415				
	Power factor	1				
	Voltage accuracy	±1%				
	Output frequency	Mains mode	Synchronized with the input frequency; When the utility frequency exceeds the maximum ±10% (adjustable to ±1%, ±2%, ±4%, ±5%), the output frequency is 50 × (±0.2%) Hz			
		Battery mode	(50/60±0.2%)Hz			
		Crest Ratio	3: 1			
		Switching time	Mains mode → Bypass mode 0ms(tracking); Mains mode → Battery mode:0ms			
		Overload capacity	At 110% load :After 60 minutes , switch to bypass mode ; At 125% load :After 10 minutes , switch to bypass mode ; At 150% load :After 1 minute , switch to bypass mode; above 150%, immediately switch to bypass mode			
		THDV	≤2%(100%Linear Load); ≤5%(100%Non-linear Load)			
	Efficiency	96%				
	Communication interface	supports RS232, RS485, 2 intelligent slots and dry contact				
Battery	Battery voltage	±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)				
	Charging current(A)	Cabinets	30 max	50 max	60 max	100 max
Module		10 max				
Environment	Operating temperature	0°C~40°C				
	Relative humidity	0~95%Non-condensing				
	Storage temperature	-25°C~55°C				
	Altitude	< 1500 meters				
Physical parameters	Dimensions: D×W×H (mm)	Cabinets	850x600x1350	850x600x1350	850x600x1350	850x600x2000
		Module	620x440x86			
	Net weight(Kg)	Cabinets	158	158	158	245
		Module	21.6			

# LY-UM Series Modular UPS

## 30-300kVA



### Product Features

#### ▼ Digital control

- All parts of the architecture of this series of UPS are digitally controlled, and all UPS performance indicators are excellent.

#### ▼ High power density modular design

- Single module capacity of 30KVA, all modules are 2U in height; UPS modules can be added and pulled out online.

#### ▼ 19-inch standard cabinet

- Adopting 19-inch standard cabinet appearance, beautiful and generous, can perfectly match the application environment of the server room.

#### ▼ N+X parallel redundancy

- When the number of redundant modules reaches two or more, the system availability reaches 99.999%, and the MTBF (Mean Time Between Failure) reaches more than 250,000 hours; it supports the parallel connection of 4 cabinets between cabinets, and the battery packs can be shared when the cabinets are connected.

#### ▼ Intelligent Battery Management

- The user can set the charging current, constant current, constant voltage and float charging modes can be automatically and smoothly switched, the number of batteries 30-50 optional.

#### ▼ LCD colour display

- Cabinet oversized LCD display with touch control function, bilingual Chinese/English optional.

#### ▼ Safe and convenient to maintain

- When an emergency occurs, it can be switched to the maintenance bypass power supply so that maintenance personnel can safely perform maintenance on-line; emergency shutdown can be performed by pressing the EPO button in an emergency; and it has a remote emergency shutdown (REPO) function.

#### ▼ Intelligent Management

- Centralised monitoring module with hot-swappable function, RS485 communication interface, optional installation of SNMP cards, relays, dry contact cards and other options.

### Product Overview

LY-UM series 30-300kVA three-in-three-out UPS power supply, the product adopts modular design and N + X parallel redundancy technology, the product capacity covers 30kVA to 300kVA between the various power segments, to facilitate the user's flexible configuration and gradual investment. This series of UPS can solve almost all the power problems, such as power failure, utility high voltage, utility low voltage, instantaneous voltage drop, amplitude reduction oscillation, high voltage pulse, voltage fluctuation, surge voltage, harmonic distortion, clutter interference, frequency fluctuation and other power problems.

### Application Fields

This product has a wide range of applications, providing safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as electric power, manufacturing, petrochemicals, transport, medical care, finance and so on.

### Detailed parameters

Model LY-UM		30-90	30-150	30-180	30-300	
Capacity	Cabinet Capacity(kVA)	30-90	30-150	30-180	30-300	
	Power Module(kVA)	30				
Input	Configuration	Three-phase, four-wire system with a ground wire				
	Rated voltage(Vac)	380/400V/415				
	Voltage range(Vac)	208~478				
	Frequency range(Hz)	40~70				
	Power factor	≥0.99				
	Bypass voltage range	380Vac upper limit: 25% ( optional+10%, +15%, +20% ) ; 400Vac Upper limit: 20% (optional+10%, +15% ) 415Vac Upper limit: 15% (optional +10%); Lower limit: -45% (optional -20%, -30%) Frequency protection range : ±10%				
	THDi	≤3% (100%Non-linear Load)				
Output	Configuration	Three-phase, four-wire system with a ground wire				
	Rated voltage(Vac)	380/400V/415				
	Power factor	1				
	Voltage accuracy	±1%				
	Output frequency	Mains mode	Synchronized with the input frequency; When the utility frequency exceeds the maximum ±10% (adjustable to ±1%, ±2%, ±4%, ±5%), the output frequency is 50 × (±0.2%) Hz			
		Battery mode	(50/60±0.2%)Hz			
	Crest Ratio	3: 1				
	Switching time	Mains mode → Bypass mode 0ms(tracking); Mains mode → Battery mode:0ms				
	Overload capacity	At 110% load :After 60 minutes , switch to bypass mode ; At 125% load :After 10 minutes , switch to bypass mode ; At 150% load :After 1 minute , switch to bypass mode; above 150%, immediately switch to bypass mode				
	THDV	≤2%(100%Linear Load); ≤5%(100%Non-linear Load)				
Efficiency	96%					
Communication interface	supports RS232, RS485, 2 intelligent slots and dry contact					
Battery	Battery voltage	±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)				
	Charging current(A)	Cabinets	30 max	50 max	60 max	100 max
Module		10 max				
Environment	Operating temperature	0°C~40°C				
	Relative humidity	0~ 95% (Non-condensing)				
	Storage temperature	-25°C~55°C				
	Altitude	< 1500 meters				
Physical parameters	Dimensions: D×W×H (mm)	Cabinets	850×600×1350	850×600×1350	850×600×1550	850×600×2000
		Module	620×440×86			
	Net weight(Kg)	Cabinets	158	158	167	245
		Module	30kVA: 21.6			

# LY-UM Series Modular UPS

## 50-600kVA



### Product Features

#### ▼ technologically advanced

- Adopting digital control, excellent performance, can connect completely unbalanced load.
- The efficiency of the whole machine is up to 96%.
- Output power factor is 1.

#### ▼ High reliability

- The centralised control unit is redundantly connected in parallel, one failure does not affect the operation of the whole machine, and the availability of N+X parallel redundancy reaches 99.999%.
- The centralised monitoring module has hot-swappable function and adopts centralised bypass power supply, which improves the power supply capacity of bypass power supply.
- Equipped with EPO function and remote emergency power off (REPO) function.

#### ▼ Convenient and flexible

- Modular design, users can flexibly increase the number of modules.
- Short downtime for maintenance, when UPS emergencies occur, maintenance personnel can safely repair online.
- Touch screen display provides rich UPS status information, warning information, fault information, etc.

#### ▼ Intelligent design

- LCD screen can be set battery capacity, charging current, to achieve automatic and smooth switching of charging mode.
- Adopt advanced two-stage three-stage intelligent charging, taking into account fast charging and prolonging battery life.
- Abundant options, can choose to install SNMP card, relay, dry contact card, and so on.

#### ▼ Environmentally Friendly

- Adopting 19-inch standard cabinet, perfectly matching the application environment of the server room.
- Parallel machines share the same battery, greatly reducing the number of battery configurations.
- The number of external batteries is 30-50 optional, which is convenient for users to configure batteries flexibly.

### Product Overview

LY-UM series 50-600kVA modular UPS adopts digital control, modular design and N+X parallel redundancy technology. The capacity of the product covers all power bands between 50kVA and 600kVA, which is convenient for users to configure flexibly and invest gradually. It can be paralleled by 4 units to 2400kVA.

### Application Fields

This product has a wide range of applications, providing safe, stable, reliable and environmentally friendly power protection for key loads in various industrial fields such as electric power, manufacturing, petrochemicals, transport, medical care, finance and so on.

### Detailed parameters

Model LY-UM		50-200	50-300	50-400	50-500	50-600
Rated capacity	Cabinets	50~200	50~300	50~400	50~500	50~600
	Module	50kW				
Maximum Number of Installed Modules		4	6	8	10	12
Input						
Primary Input	Rated input voltage	380/400/415Vac				
	Voltage range	138-485Vac for full rating; 138-305Vac with linear derating, 305-485Vac without derating;				
	Configuration	Three-phase, five-wire				
	Frequency range	40-70Hz				
	Power factor	≥0.99				
	THDi	≤3% (100%Linear Load)				
Bypass inputs	Rated input voltage	380/400/415Vac				
	Voltage range	220Vac upper limit: 25% (optional+10%, +15%, +20%); 230Vac Upper limit: 20% (optional+10%, +15%) 240Vac Upper limit: 15% (optional +10%); Lower limit: -45% (optional-10%, -20%, -30%)				
	Configuration	Three-phase, five-wire				
	Bypass synchronization tracking range	±10%				
Output						
Voltage		380/400/415Vac±1%				
Power factor		1				
Frequency(Hz)	Mains mode	settable to ±1%/±2%/±4%/±5%/±10%				
	Battery mode	(50/60±0.1%)Hz				
Waveform		sine wave				
Current Crest Ratio		3: 1				
THDV		≤2% (100%Linear Load); ≤3% (100%Non-linear Load)				
Switching time(ms)		Mains mode → Bypass mode 0ms(tracking); Mains mode → Battery mode:0ms				
Overall efficiency(%)		96%				
Overload capacity		At 110% load :After 60 minutes , switch to bypass mode ; At 125% load :After 10 minutes , switch to bypass mode ; At 150% load :After 1 minute , switch to bypass mode;				
Battery						
Maximum Charging Current of Module		20				
Battery voltage		±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (optional from 30 to 50 cells)				
Environment						
Operating temperature		0°C~40°C				
Storage temperature		-25°C~55°C(batteries not included)				
Operating humidity		0~95% (Non-condensing)				
Altitude		< 1500 meters (for altitudes exceeding 1500m, derate according to the GB/T 3859.2 specifications)				
Noises(dB)(1 meter distance)		<65	<68		<70	
Other						
Alarm function		Multiple alarm functions for overload, mains power failure, UPS failure, battery undervoltage, and etc.				
Protection function		short circuit, overload, overtemperature, battery undervoltage, output overvoltage/undervoltage, fan failure alarm, lightning protection, and bypass backfeed				
Communication interface		CAN、RS485、 Network Interface 、 Dry Contact、 Parallel Operation Interface 、 Intelligent Slot 、 Temperature Sensor Interface				
Physical parameters						
Dimensions: D×W×H(mm)	Cabinets	850×600×2000		850×600(1200)×2000		850×1200×2000
	Module			620×440×130		
Net weight(kg)	Cabinets	196	240	260/411	435	508
	Module	33.3				
Execution Standard		YD/T 2165-2017				

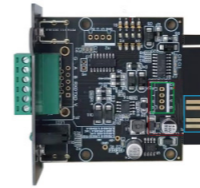
# LY-UM Series Power Module



## Detailed parameters

Model LY-UM	10	15	20	25	30	50
Phase	Three-input Three-output					
Capacity	10KW	15KW	20KW	25KW	30KW	50KW
Property	3P/3P 10KVA/10KW Power Module	3P/3P 15KVA/15KW Power Module	3P/3P 20KVA/20KW Power Module	3P/3P 25KVA/25KW Power Module	3P/3P 30KVA/30KW Power Module	3P/3P 50KVA/50KW Power Module
Physical parameters	620×440×86 (2U)					620×440×131(3U)
	20.8	20.8	20.8	21.6	21.6	33

# Remote Monitoring & Management Accessories



Modbus

- Multiple UPS can be controlled and monitored via RS-485 interface.
- Supports MODBUS RTU communication protocol.
- Read and write operation of data through registers.
- Provides surge protection.



SNMP

- Controls and monitors multiple UPSs via RJ-45 interface.
- Display UPS data (voltage, frequency, load level, battery capacity) in a real-time and dynamic graphical interface.
- Warning notifications can be transmitted via audible and visual alarms, radio, mobile messenger, SNMP trap, and email.
- Historical data can be stored in a database on the terminal PC with simple firmware updates.

The AS-400 communication card provides contact signals to remotely monitor and control the UPS, and in order to meet the needs of different environments, the AS-400 card can be used to set the signal status of the dry contact (open or closed) by using jumpers for the following environments:

- IBM servers, personal computers and workstation equipment.
- Automatic control of industrial equipment and communications applications.



Dry Contact card

### Multi-purpose:

Support 1 channel UPS access, 5 channels of switching input detection, 3 channels of remote control output interface.

### WEB monitoring:

WEB web interface intuitively displays the real-time operation status and data of UPS power supply, environmental temperature and humidity, water leakage, smoke sensor and other equipment, as well as the historical operation data of the equipment.

### Alarm and control function:

In the case that UPS itself supports remote power on/off, after setting up operation through WEB webpage, control commands can be issued through WEB webpage and SMS to realise remote discharge test of UPS and remote power on/off of UPS.

### Server shutdown protection function:

Through the "server automatic shutdown protection software", the server can be automatically shut down and protected when there is an abnormal situation such as utility power failure.

### SMS Alarm Query Function:

Support up to 8 administrator mobile phone numbers, users can actively send SMS to query the status of UPS and other equipment.

### WeChat alarm query function:

Users can use mobile phone WeChat to scan the QR code on the WEB page [Cloud Monitoring Settings] option to complete the setup, and then share the QR code of the equipment to other people's attention (no limitation on the number of people).



Cloud monitoring terminals

# LY-BA/BH Series lead-acid batteries



## Capacity range

24-280AH

## Rated voltage

2-12V

## Application Fields

- Municipal utilities, commercial construction.
- Petroleum, chemical, electric power construction.
- Metal, mining, cement, paper industry.
- Telecommunications, information, electronics industry.

## Technical features

- AGM Valve Seal Technology.
- High strength ABS slot cover material.
- Wide temperature range (-15-45°C).
- Optimum application temperature (20±5°C).
- No leakage, safe and reliable.
- Vertical or horizontal use, easy to transport and install.
- High sealing reaction efficiency, small water loss, no need to add distilled water or electrolyte, easy to use and maintain.
- Low self-discharge rate.

## 2V IDC Series

Model	Rated voltage	Capacity(C10/25°C)	External dimensions (mm <sup>3</sup> )				Net weight
			L	W	H	overall height	
LY-BA02300	2V	300AH	176	156	330	365	18.2Kg
LY-BA02400	2V	400AH	211	176	330	365	24.5Kg
LY-BA02500	2V	500AH	243	174	330	365	28.7Kg
LY-BA02600	2V	600AH	302	176	330	339	34.2Kg
LY-BA02700	2V	700AH	302	176	330	339	37Kg
LY-BA02800	2V	800AH	411	175	331	339	47.5Kg
LY-BA021000	2V	1000AH	479	175	330	339	57.5Kg
LY-BA021200	2V	1200AH	479	175	330	339	62Kg
LY-BA021500	2V	1500AH	404	355	343	350	87Kg
LY-BA022000	2V	2000AH	492	352	341	350	115.5Kg
LY-BA023000	2V	3000AH	710	352	338	356	178Kg

## Detailed parameters

### 12V IDC Series

Model	Rated voltage	Capacity (C10/25°C)	External dimensions (mm <sup>3</sup> )				Net weight
			L	W	H	overall height	
LY-BA1224	12V	24AH	175	166	125	125	6.7Kg
LY-BA1238	12V	38AH	197	166	173	173	11.2Kg
LY-BA1265	12V	65AH	350	165	173	173	18.6Kg
LY-BA12100	12V	100AH	330	172	213	221	28.0Kg
LY-BA12120	12V	120AH	407	173	208	232	32.5Kg
LY-BA12150	12V	150AH	480	170	239	242	40.0Kg
LY-BA12200	12V	200AH	522	239	220	228	57.0Kg
LY-BA12250	12V	250AH	520	268	220	226	67.5Kg

### 12V Standard Series

Model	Rated voltage	Capacity (C20/25°C)	External dimensions (mm <sup>3</sup> )				Net weight
			L	W	H	overall height	
LY-BA1224Z	12V	24AH	175	166	125	125	6.5Kg
LY-BA1238Z	12V	38AH	197	166	173	173	10.7Kg
LY-BA1265Z	12V	65AH	350	165	173	173	16.9Kg
LY-BA12100Z	12V	100AH	330	172	213	221	27.0Kg
LY-BA12120Z	12V	120AH	407	173	208	232	31.8Kg
LY-BA12150Z	12V	155AH	480	170	239	242	39.2Kg
LY-BA12200Z	12V	200AH	522	239	220	228	54.0Kg
LY-BA12250Z	12V	250AH	520	268	220	226	64.8Kg

### 12V High-rate Series

Model	Rated voltage	Capacity (C10/25°C)	External dimensions (mm <sup>3</sup> )				Net weight
			L	W	H	overall height	
LY-BH12100	12V	360W/100AH	330	173	213	16	30Kg
LY-BH12120	12V	460W/120AH	408	177	225	225	37.5Kg
LY-BH12150	12V	560W/145AH	483	170	238.5	239	46.5Kg
LY-BH12180	12V	650W/180AH	532	207	214	220	56.5Kg
LY-BH12190	12V	705W/190AH	532	207	214	220	59Kg
LY-BH12195	12V	750W/195AH	503	212	226.5	234.5	61Kg
LY-BH12200	12V	800W/200AH	503	212	226.5	234.5	62.8Kg
LY-BH12225	12V	845W/225AH	496	259	227	233	74.5Kg
LY-BH12235	12V	890W/235AH	496	259	227	233	77Kg

### 12V Colloid Series

Model	Rated voltage	Capacity (C20/25°C)	External dimensions (mm <sup>3</sup> )				Net weight
			L	W	H	overall height	
LY-BA1238J2	12V	38AH	197	166	173	173	11.8Kg
LY-BA1265J2	12V	65AH	350	165	173	173	21.2Kg
LY-BA12100J2	12V	100AH	407	173	208	232	32.1Kg
LY-BA12120J2	12V	120AH	407	173	208	232	35.0Kg
LY-BA12150J2	12V	155AH	480	170	239	242	45.0Kg
LY-BA12200J2	12V	200AH	522	239	220	228	62.0Kg
LY-BA12250J2	12V	250AH	520	268	220	226	72.0Kg

# LY-BR Series Battery Pack

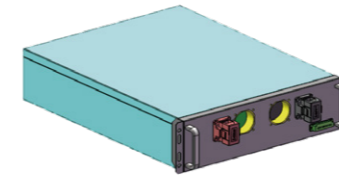


## Technical features

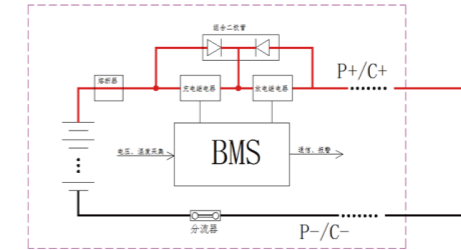
- Adopting rack-mounted, dual interface design, it can realise the rapid parallel use of battery packs. It has the advantages of integration, modularity, plug-in installation and strong capacity expansion.
- The rated voltage level covers DC36V, 72V, 96V, 192V, 240V to meet the needs of different sections of UPS.
- Satisfy the business requirements of different stages of growing server rooms, and flexibly respond to different capacity expansion needs.
- Meet the unified configuration and management requirements of distributed server rooms.

Model	Applicable models	Capacity(AH)	Number of Cells per Group × Number of Groups	Current(A@Max)	Rated voltage(Vdc)
LY-BRC0609-2	1K	9	3×2	50	36
LY-BRC0609	2K	9	6×1	50	72
LY-BRC1209-2	2K	9	6×2	50	72
LY-BRC0809	3K	9	8×1	50	96
LY-BRC1607-2	3K	7	8×2	50	96
LY-BRC1609-2	3K	9	8×2	50	96
LY-BRC1607	6K、10K	7	16×1	50	192
LY-BRC1609	6K、10K	9	16×1	50	192
LY-BRC2007	6K、10K	7	20×1	50	240
LY-BRC2009	6K、10K	9	20×1	50	240

# Lithium-ion system



(51.2V 50AH\100AH)



## Intelligent Fire Protection System

- Perfluorohexanone fire extinguishing agent.
- Hot melt fire hose design.
- Module built-in + cabinet protection, eliminating internal and external risks.
- 7\*24 hours online monitoring, safety without dead angle.

## Technical features

### High Reliability

- Lithium iron phosphate batteries, safe and reliable.
- Long service life, 80% DOD cycle times up to 3000 times.
- Three layers of BMS management system, layer by layer to ensure the reliability of lithium batteries.

### Cost-effective

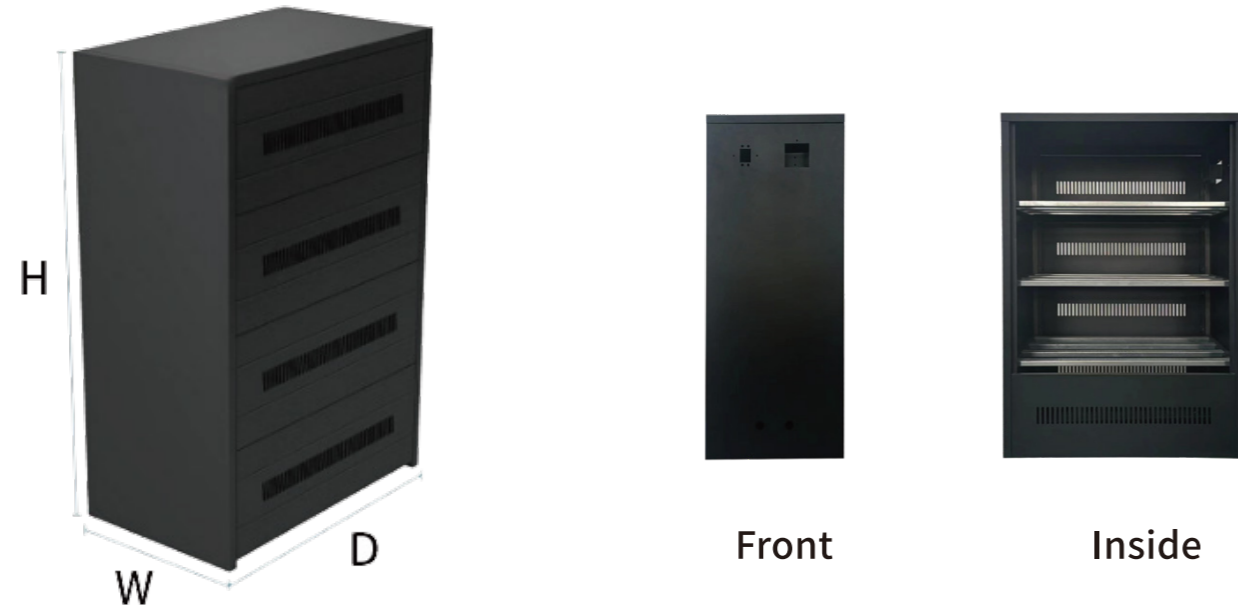
- Total investment can be almost the same as lead-acid batteries Intelligent Management.

### Intelligent management

- Modular design, simple installation, self-management function, free of daily inspection.
- Communicate with UPS dry contact, control the charger to switch between charging and discharging.

Model	Rated voltage (Vdc)	Rated capacity (Ah)	Rated power (Kw)	Maximum output power(Kw)	Cabinet Paralleling Capability	IP level	Dimensions : WxDxH (mm <sup>3</sup> )
LY-BL409-50-4C	409.6	50	20.48	81.92	≤15	IP2.0	600×800(1000/1200)×2000
LY-BL512-50-4C	512	50	25.6	102.4	≤15	IP2.0	600×800(1000/1200)×2000
LY-BL409-100-1C	409.6	100	40.96	40.96	≤15	IP2.0	600×800(1000/1200)×2000
LY-BL512-100-1C	512	100	51.2	51.2	≤15	IP2.0	600×800(1000/1200)×2000
LY-BL409-100-4C	409.6	100	40.96	163.84	≤15	IP2.0	600×1000(1200)×2000
LY-BL512-100-4C	512	100	51.2	204.8	≤15	IP2.0	600×1000(1200)×2000
LY-BL409-200-1C	409.6	200	81.92	81.92	≤15	IP2.0	600×1000(1200)×2000
LY-BL512-200-1C	512	200	102.4	102.4	≤15	IP2.0	600×1000(1200)×2000

# LY-EC Series Battery Cabinet



## Product Overview

LY-EC series battery cabinet adopts assembled structure design, easy to disassemble and assemble, simple and generous appearance, is the most economical battery pack assembly programme for small and microcomputer room UPS power supply.

## Application Fields

UPS Power Battery Pack Installation

## Installation method

Floor standing combination type

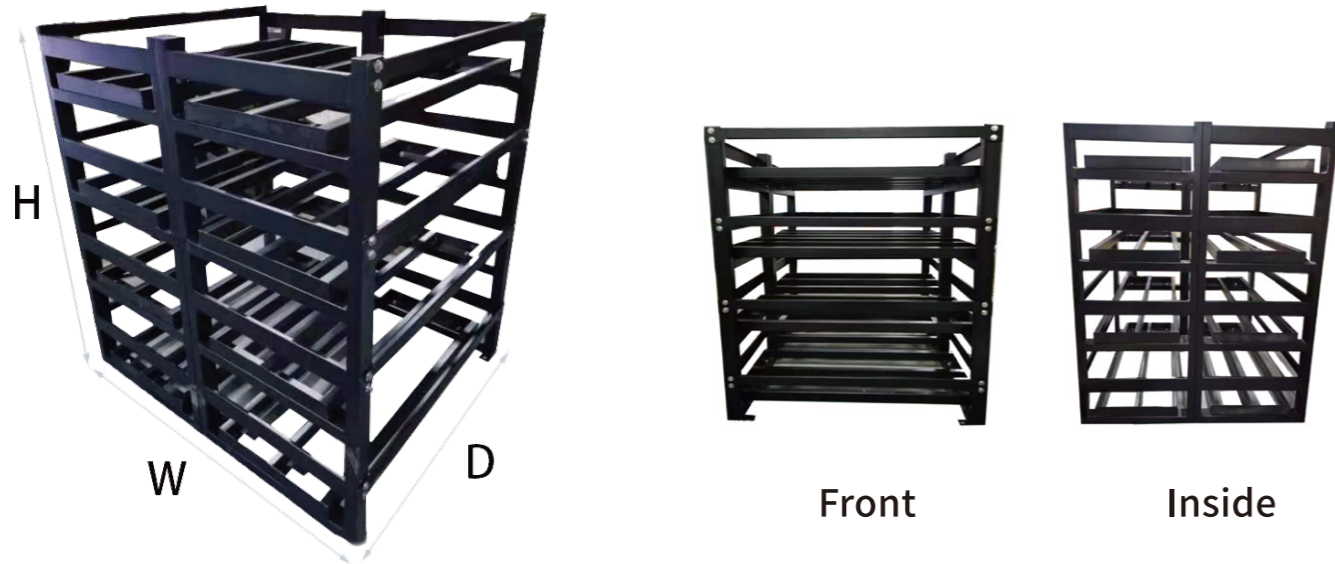
## Technical features

- Craftsmanship: imported advanced high-precision laser cutting machine and CNC punching machine, CNC bending machine processing and shaping, professional welders carefully welded, welded without gaps and burrs, the surface of the sanding, pickling, phosphating, descaling and other technologies after the anti-static plastic spraying, anti-corrosion treatment of the surface.
- Unique installation method, easy to dismantle for transport, easy to assemble, simple, strong and safe, beautiful appearance. Widened rectangular tube in the middle can put small batteries. The switch hole position adopts knock-down hole, which can be used for various types of small switches.
- The assembled structure design enables tool-less on-site installation.
- Colour: Black. Other colours can be customized.

## Detailed parameters

Model	Battery Specification (AH/12V)	Number of cells (pics)	Dimensions : WxDxH (mm <sup>3</sup> )	Arrangement	Battery dimensions for reference : D×W×H (mm <sup>3</sup> )	Other	
LY-EC1	65/100	1	220×450×285	1 tier, 1 row	407×173×233	No connecting wires	
LY-EC2		2	440×390×285			Standard configuration includes 1 piece of 4mm <sup>2</sup> connection wire	
LY-EC3		3	440×560×285			Standard configuration includes 2 pieces of 4mm <sup>2</sup> connection wire	
LY-EC4		4	470×447×645	2 tiers, 1 row		Standard configuration includes 5 pieces of 6mm <sup>2</sup> connection wire,Optional circuit breaker	
LY-EC6		6	470×613×645			Standard configuration includes 7 pieces of 6mm <sup>2</sup> connection wire,Optional circuit breaker	
LY-EC8		8	470×787×645			Standard configuration includes 9 pieces of 6mm <sup>2</sup> connection wire,Optional circuit breaker	
LY-EC10		10	470×957×645			Standard configuration includes 11 pieces of 6mm <sup>2</sup> connection wire,Optional circuit breaker	
LY-EC12		12	470×787×925	3 tiers, 1 row		Standard configuration includes 13 pieces of 6mm <sup>2</sup> connection wire,Optional circuit breaker	
LY-EC16		120	16	470×787×1205		4 tiers, 1 row	Standard configuration includes 17 pieces of 6mm <sup>2</sup> connection wire,Optional circuit breaker
LY-EC20							20
LY-EC32			32	900×787×1205		4 tiers, 2 rows	Standard configuration includes 34 pieces of 10mm <sup>2</sup> connection wire,Optional circuit breaker
LY-EC1032							Optional circuit breaker, connection wire
LY-EC1040	40	900×957×1205	Optional circuit breaker, connection wire				
LY-EC1232	32	900×787×1205	Optional circuit breaker, connection wire				
LY-EC1240	150	40	900×957×1205	4 tiers, 2 rows	Optional circuit breaker, connection wire		
LY-EC1532					32	1100×800×1350	Optional circuit breaker, connection wire
LY-EC1540	40	1100×950×1350	4 tiers, 2 rows	480×170×239	Optional circuit breaker, connection wire		
LY-EC2032	200	32	1150×1050×1350	4 tiers, 2 rows	522×239×228	Optional circuit breaker, connection wire	
LY-EC2040						40	1150×1300×1350

# LY-ES Series Battery Rack



## Product Overview

LY-ES series battery rack adopts all-steel frame assembled structure design, easy to disassemble and assemble, simple and generous appearance, is the best battery pack assembly solution for UPS power supply in medium and large server rooms.

## Application Fields

UPS Power Battery Pack Installation

## Installation method

Floor standing combination type

## Technical features

- All steel frame structure, more stable performance.
- Open way design, easy maintenance.
- Detachable structure, more flexible installation and transport.
- Multiple racks can be expanded in parallel.
- Colour: black. Other colours can be customized.
- Size can be customised according to project requirements.



## Detailed parameters



Model	Battery Specification (AH/12V)	Number of cells (pics)	Dimensions : WxDxH (mm <sup>3</sup> )	Arrangement	Battery dimensions for reference : D×W×H(mm <sup>3</sup> )	Other
LY-ES16-10041	100	16	800×450×1500	4 tiers, 1 row	330×174×220	Optional battery switch box (cabinet), connection wire (copper busbar)
LY-ES16-10042		16	450×800×1500	4 tiers, 2 rows		
LY-ES20-10041		20	1000×450×1500	4 tiers, 1 row		
LY-ES32-10041		32	1600×450×1500	4 tiers, 1 row		
LY-ES32-10042		32	800×850×1500	4 tiers, 2 rows		
LY-ES40-10041		40	1200×450×1500	4 tiers, 1 row		
LY-ES40-10042		40	1000×850×1500	4 tiers, 2 rows		
LY-ES16-12041		100/120	16	800×530×1500		
LY-ES16-12042	16		450×1000×1500	4 tiers, 2 rows		
LY-ES20-12041	20		1000×530×1500	4 tiers, 1 row		
LY-ES32-12041	32		1600×530×1500	4 tiers, 1 row		
LY-ES32-12042	32		850×1000×1460	4 tiers, 2 rows		
LY-ES40-12041	40		2000×530×1460	4 tiers, 1 row		
LY-ES40-12042	40		1000×1060×1500	4 tiers, 2 rows		
LY-ES16-15041	150		16	850×600×1500	4 tiers, 1 row	480×170×239
LY-ES16-15042		16	450×1100×1500	4 tiers, 2 rows		
LY-ES20-15041		20	1000×600×1500	4 tiers, 1 row		
LY-ES32-15041		32	1600×600×1500	4 tiers, 1 row		
LY-ES32-15042		32	850×1200×1500	4 tiers, 2 rows		
LY-ES40-15041		40	2000×600×1500	4 tiers, 1 row		
LY-ES40-15042		40	1000×1100×1500	4 tiers, 2 rows		
LY-ES16-20041		200	16	1100×650×1500	4 tiers, 1 row	
LY-ES16-20042	16		600×1200×1500	4 tiers, 2 rows		
LY-ES20-20041	20		1350×650×1500	4 tiers, 1 row		
LY-ES32-20041	32		2200×650×1500	4 tiers, 1 row		
LY-ES32-20042	32		1100×1200×1500	4 tiers, 2 rows		
LY-ES40-20041	40		2700×650×1500	4 tiers, 1 row		
LY-ES40-20042	40		1350×1200×1500	4 tiers, 2 rows		
LY-ES16-25041	250		16	1200×650×1500	4 tiers, 1 row	520×268×250
LY-ES16-25042		16	650×1300×1500	4 tiers, 2 rows		
LY-ES20-25041		20	1500×650×1500	4 tiers, 1 row		
LY-ES32-25041		32	2400×650×1500	4 tiers, 1 row		
LY-ES32-25042		32	1200×1350×1500	4 tiers, 2 rows		
LY-ES40-25041		40	3000×650×1500	4 tiers, 1 row		
LY-ES40-25042		40	1500×1300×1500	4 tiers, 2 rows		