–Data Center Product Line –

KSTAR **Classic Tower & Convertible UPS Series**

KSTAR

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Version number: KSD/C&C 2023-06

KSTAR

Features

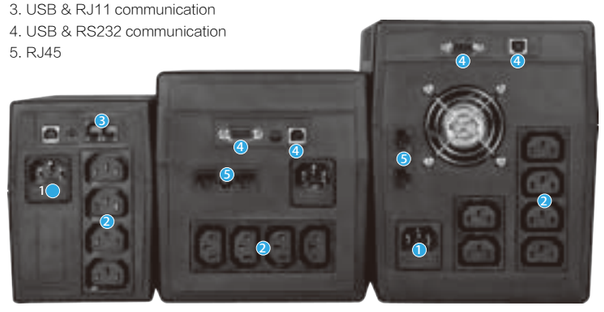
- AVR boost and buck
- Cold start function
- Smart RS-232/USB interface for power management
- Built-in self-diagnostic function
- Modem/LAN internet protection
- Generator compatible(Optional)
- LCD or LED panel for option
- Fast charging capacity
- Auto charging at off mode
- Auto restart while AC is recovering

Optional socket

Two kinds of color LCD display

LED display

1. AC input
2. Output socket
3. USB & RJ11 communication
4. USB & RS232 communication
5. RJ45



Rear Panel

Technical Specifications

Model	UA40	UA60	UA80	UA100	UA120	UA150	UA200
Capacity(VA/Watts)	400 / 240	600 / 360	800 /480	1000 / 600	1200 / 720	1500 / 900	2000 / 1200
INPUT							
Nominal Input Voltage	110/120 Vac or 220/230/240 Vac						
Operating Voltage Range	81~145 Vac / 162~290 Vac						
Operating Frequency Range	50/60 Hz (1 ± 10%)						
OUTPUT							
Output Voltage range (Batt. Mode)	Simulated Sinewave at nominal voltage ± 10%						
Frequency Range (Batt. Mode)	50 Hz or 60 Hz ± 1 Hz						
Transfer Time	Typical 2~6 ms, 10ms max.						
BATTERY							
Battery Type & Number	12 V / 4.5 Ah x 1	12 V / 7Ah x 1	12 V / 9 Ah x 1	12 V / 7 Ah x 2	12 V / 7 Ah x2	12 V /9 Ah x 2	12 V / 9 Ah x 2
Typical Recharge time	6~8 hours (To 90% capacity)						
PROTECTION							
Full Protection	Overload and overcharge protection						
INDICATORS							
LED (LED version)	AC Mode, Battery Mode, Load Level, Battery Level						
LCD (LCD version)	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, Battery Low						
ALARM							
Battery Mode	Sounding every 10 seconds						
Battery Low	Sounding every second						
Overload	Sounding every 0.5 second						
Battery Replacement Alarm	Sounding every 2 seconds						
Fault	Continuously sounding						
MANAGEMENT							
USB & RS-232 port (Optional)	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC						
ENVIRONMENT							
Operating Temperature	0~40℃						
Humidity Range	0~95 % (Non-condensing)						
Noise Level	<40dB (1 meter from surface)						
PHYSICAL							
Dimension, W × D × H (mm)	101 × 298 × 142			149.3 × 338 × 162		158 × 380 × 198	
Net Weight (kg)	3.55	4.25	4.9	7.8	8	11.1	11.5
STANDARDS							
Safety	IEC/EN62040-1;IEC/EN60950-1						
EMC	IEC/EN62040-2;IEC61000-4-2;IEC61000-4-3;IEC61000-4-4;IEC61000-4-5;IEC61000-4-6;IEC61000-4-8						

Specifications are subject to change without prior notice.

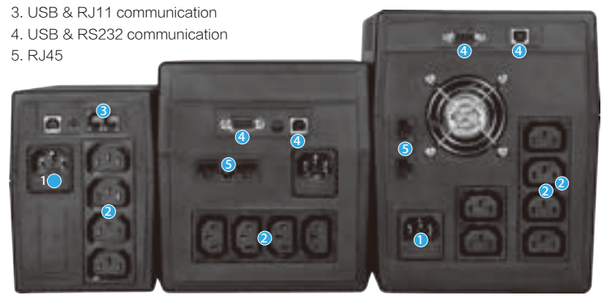
Features

- AVR boost and buck
- Cold start function
- Smart RS-232/USB interface for power management
- Built-in self-diagnostic function
- Modem/LAN internet protection
- Generator compatible(Optional)
- Fast charging capacity
- Auto charging at off mode
- Auto restart while AC is recovering

Optional socket

Two kinds of color LCD display

1. AC input
2. Output socket
3. USB & RJ11 communication
4. USB & RS232 communication
5. RJ45



Rear Panel

Technical Specifications

Model	UA240	UA300
Capacity(VA/Watts)	2400 / 1440	3000 / 1800
INPUT		
Nominal Input Voltage	220/230/240 Vac	
Operating Voltage Range	162~290 Vac	
Operating Frequency Range	50/60 Hz (1 ± 10%)	
OUTPUT		
Output Voltage Range (Batt. Mode)	Simulated Sinewave at nominal voltage ± 10%	
Frequency Range (Batt. Mode)	50 Hz or 60 Hz ± 1 Hz	
Transfer Time	Typical 2~6 ms, 10ms max.	
BATTERY		
Battery Type & Number	12 V / 7 Ah x 4	12 V / 9 Ah x 4
Typical Recharge Time	6~8 hours (To 90% capacity)	
PROTECTION		
Full Protection	Overload and overcharge protection	
INDICATORS		
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, Battery Low	
ALARM		
Battery Mode	Sounding every 10 seconds	
Battery Low	Sounding every second	
Overload	Sounding every 0.5 second	
Battery Replacement Alarm	Sounding every 2 seconds	
Fault	Continuously sounding	
MANAGEMENT		
USB & RS-232 Port(Optional)	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC	
ENVIRONMENT		
Operating Temperature	0~40℃	
Humidity Range	0~95% (Non-condensing)	
Noise Level	<40dB (1 meter from surface)	
PHYSICAL		
Dimension, W × D × H (mm)	144 × 432.5 × 207	
Net Weight (kg)	20	23
STANDARDS		
Safety	IEC/EN62040-1;IEC/EN60950-1	
EMC	IEC/EN62040-2;IEC61000-4-2;IEC61000-4-3;IEC61000-4-5;IEC61000-4-6;IEC61000-4-8	

Specifications are subject to change without prior notice.

Features

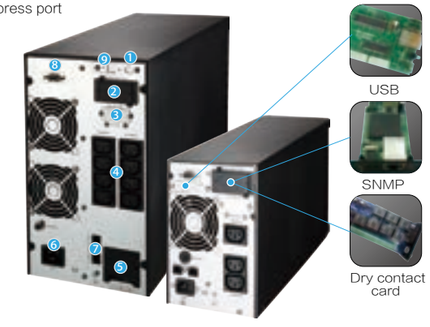
- True double-conversion
- Digital control guarantees high reliability
- ECO mode operation for energy saving
- Output receptacle control for non-critical load shedding capability
- Emergency power off function(EPO)
- Generator compatible
- Communications:RS-232,USB,SNMP card(Optional), Relay card (Optional)
- Bypass can be used when UPS is off(Setted in LCD)
- Cold start

Battery pack. (Optional)

Optimized battery configuration
1K:24/36Vdc
1.5K:36Vdc
2K:48/72/96Vdc
3K:72/96Vdc

Control Panel
Up to 50 items set by LCD

1.EPO port
2.Intelligent slot for SNMP card,dry contact card etc.
3.External battery cabinet connector
4.Output slots including two segments
5.Output terminals
6.Input slot
7.RJ45 surge suppress port
8.RS232 port
9.USB port



Rear Panel

Technical Specifications

MODEL		UB10-24	UB10	UB10L	UB15	UB15L	UB20-48	UB20	UB20-96	UB20L	UB20L-96	UB30	UB30-96	UB30L	UB30L-96
Capacity (VA/Watts)		1000VA/900W			1500VA/1350W		2000VA/1800W					3000VA/2700W			
INPUT															
Nominal Voltage		208/220/230/240Vac(L+N+PE)													
Operating Voltage Range		110~300Vac @(0~60%) Load;120~300Vac @(60~70%)Load,140~300Vac @(70~80%)Load;160~300Vac @(80~100%)Load													
Operating Frequency Range		50Hz：45~55Hz，60Hz：55~65Hz Auto Sensing													
Power Factor		>0.85@25%Load;>0.95 @50%Load;>0.97@75%Load;>0.99 @ Nominal voltage& 100%Load													
OUTPUT															
Output Voltage		208/220/230/240Vac:230Vac(Default)													
Power Factor		0.9													
Voltage Regulation		±1%													
Frequency	Synchronized Range	45~55Hz ±0.02Hz@ 50Hz, 55~65Hz ±0.02Hz@60Hz													
	Battery Mode & None Synchronized Range	(50/60±0.02)Hz													
Crest Factor		3:1													
Harmonic Distortion (THDv)		≤3% with linear load													
		≤5% with non-linear load													
Waveform		Pure Sinewave													
Transfer Time		Utility to Battery : 0ms; Utility to Bypass: 4ms(Typical)													
EFFICIENCY															
AC Mode		88%			88%		89%					90%			
Battery Mode		84%	85%		85%		85%	86%				87%			
ECO Mode		>93%			>94%										
BATTERY															
Battery Type		12V/9AH	12V/7AH/9AH	12V	12V/7AH/9AH	12V	12V/9AH	12V/7AH/9AH	12V/7AH	12V		12V/9AH	12V/7AH	12V	
Numbers		2	3	3×N	3	3×N	4	6	8	6×N	8×N	6	8	6×N	8×N
Maximum Charging Current (A)		1.0		6.0/12.0	1.0	6.0/12.0	1.0			6.0/12.0		1.0		6.0/12.0	
Charging Voltage(Vdc)		27.4V±1%	41.1V±1%				54.8±1%	82.2V±1%	109.6V±1%	82.2V±1%	109.6V±1%	82.2V±1%	109.6V±1%	82.2V±1%	
109.6V±1%															
Protect		Over-voltage(14.4v) / Low-voltage(10v)													
PROTECTION															
Overload	Line Mode	105~150%, 30s turn to bypass mode ; >150% 300ms turn to bypass mode													
Capacity	Battery Mode	105~150%, exceed 30s shutdown ; >150% exceed 300ms shutdown													
INDICATORS															
LED & LCD Display		Load/Battery/Input/Output/Operating Mode Information													
ALARM															
Battery Mode		Sounding every 4 seconds													
Battery Low		Sounding every second													
Overload		Sounding every 0.5 second													
Fault		Continuously Sounding													
MANAGEMENT															
Smart RS-232/USB(Preferential)		External Modbus card supported by RS232,Software supports Windows Family,Linus,FreeBSD													
Intelligent Slot		SNMP (Standard or mini) independent to RS-232(Optional)													
ENVIRONMENT															
Operating Temperature		0~40℃													
Humidity Range		0~95% (Non-condensing)													
Altitude		< 1500m													
Noise Level		<50dB@ 1Meter													
PHYSICAL															
Dimension W×D×H (mm)			144×400×215								191×468×337				
Net Weight (kg)		11.3	13.7	5.9	13.9	6.2	21.9	26.9	29.6	10.6	10.8	27.4	30.1	11.1	11.3
STANDARDS															
Safety		IEC/EN62040-1													
EMC		IEC/EN62040-2													

Specifications are subject to change without prior notice.

Technical Specifications

MODEL	EXB+24V	EXB+36V	EXB+48V	EXB+72V	EXB+96V
VOLTAGE	+24V	+36V	+48V	+72V	+96V
CHARGER INPUT					
Voltage Range	150~285Vac				
Frequency	50/60Hz				
Phase	Single phase with ground				
Current(A)	0.4	0.6	0.8	1.2	1.6
Protection	Resettable circuit breaker				
CHARGER OUTPUT					
Voltage (Vdc)	27.4±0.3	41.1±0.6	54.8±0.6	82.2±0.9	109.6±1.5
Current(A)	2A(Max)				
Protection	Fuse				
BATTERY					
Battery Type	12V 7AH/9AH; Sealed Valve Regulated Lead-Acid Battery (VRLA) ;Maintenance free				
Battery numbers per string	2	3	4	6	8
Battery string number	2				
Recharge time	8 hours to 90% capacity				
Protection	60A fast fuse				
Leakage current	<100uA				
PHYSICAL					
Dimension W×D×H (mm)	144×400×215		191×468×337		
Net Weight (kg)	13.3	18.5	30.2	35.5	45.8
INDICATORS					
LED Panel	Charging LED, Battery testing LED				
ENVIRONMENT					
Operating Temperature	0~40℃				
Humidity Range	0~90% (Non-condensing)				
Noise Level	<40dB@ 1Meter				
STANDARDS					
Safety	IEC/EN62040-1				
EMC	IEC/EN62040-2				

Specifications are subject to change without prior notice.

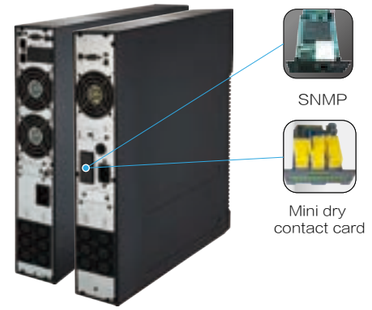
Features

- True double-conversion
- Rack-mounted and floor-standing tower can be convertible
- Patented Mimic LCD of which content can be rotated according to the type of deployment
- Digital control guarantees high reliability
- Output receptacle control for non-critical load shedding capability
- ECO mode operation for energy saving
- Emergency power off function(EPO)
- Generator compatible
- Communications:RS-232,USB,SNMP card(Optional), Relay card (Optional)
- Bypass can be used when UPS is off(Setted in LCD)
- Cold start

Optional socket

Multifunctional bracket

Easy for maintenance, hot-swappable battery



Rear Panel

Rack-Tower convertible
Two directions LCD display
Battery pack (Optional)

Technical Specifications

MODEL		UBR10	UBR10-36	UBR10L	UBR10L-36	UBR15	UBR15L	UBR20	UBR20-72	UBR20L	UBR20L-72	UBR30	UBR30L
Capacity (VA/Watts)		1000VA/900W				1500VA/1350W		2000VA/1800W				3000VA/2700W	
INPUT													
Nominal Voltage		208/220/230/240Vac(L+N+PE)											
Operating Voltage Range		110~300Vac @(0~60%) Load;120~300Vac @(60~70%)Load,140~300Vac @(70~80%)Load;160~300Vac @(80~100%)Load											
Operating Frequency Range		50Hz：45~55Hz，60Hz：55~65Hz Auto Sensing											
Power Factor		> 0.85@25%Load;>0.95 @50%Load;>0.97@75%Load;>0.99 @ Nominal voltage& 100%Load											
OUTPUT													
Output Voltage		208/220/230/240Vac:230Vac(Default)											
Power Factor		0.9											
Voltage Regulation		± 1%											
Frequency	Synchronized Range	45~55Hz ± 0.02Hz@ 50Hz, 55~65Hz ± 0.02Hz@60Hz											
	Battery Mode & None Synchronized Range	(50/60 ± 0.02)Hz											
Crest Factor		3:1											
Harmonic Distortion (THDv)		≤3% with linear load											
		≤5% with non-linear load											
Waveform		Pure Sinewave											
Transfer time		Utility to Battery : 0ms; Utility to Bypass: 4ms(Typical)											
EFFICIENCY													
AC Mode		88%				88%		89%				90%	
Battery Mode		84%	85%	84%	85%	85%		85%	86%	85%	86%	87%	
ECO Mode		94%											
BATTERY													
Battery Type		12V/9AH	12V/7AH	12V		12V/9AH	12V	12V/9AH	12V/7AH	12V		12V/9AH	12V
Numbers		2	3	2×N	3×N	3	3×N	4	6	4×N	6×N	6	6×N
Maximum Charging Current (A)		1.0	1.0	6.0/12.0		1.0	6.0/12.0	1.0	1.0	6.0/12.0		1.0	6.0/12.0
Charging Voltage(Vdc)		27.4 ± 1%	41.1 ± 1%	27.4 ± 1%	41.1	± 1%	41.1 ± 1%	54.8	± 1% 82.2	± 1% 54.8	± 1% 82.2	± 1%	82.2 ± 1%
Protect		Over-voltage(14.7v) / Low-voltage(10v)											
PROTECTION													
Overload Capacity	Line Mode	105~150%, 30s turn to bypass mode ; >150% 300ms turn to bypass mode											
	Battery Mode	105~150%, exceed 30s shutdown ; >150% exceed 300ms shutdown											
INDICATORS													
LED & LCD Display		Load/Battery/Input/Output/Operating Mode Information											
ALARM													
Battery Mode		Sounding every 4 seconds											
Battery Low		Sounding every second											
Overload		Sounding every 0.5 second											
Fault		Continuously Sounding											
MANAGEMENT													
Smart RS-232/USB(Preferential)		External Modbus card supported by RS232,Software supports Windows Family,Linus,FreeBSD											
Intelligent Slot		SNMP (Standard or mini) independent to RS-232(Optional)											
ENVIRONMENT													
Operating Temperature		0～40℃											
Humidity Range		0～95% (Non-condensing)											
Altitude		< 1500m,											
Noise Level		<50dB@ 1Meter											
PHYSICAL													
Dimension W×D×H (mm)		440×430×86.5						440×572×86.5	440×696×86.5	440×572×86.5		440×696×86.5	440×572×86.5
Net Weight (kg)		13.2	15.7	7.7	7.8	15.8	7.9	21.5	27.6	10.7	10.8	28.5	11.2
STANDARDS													
Safety		IEC/EN62040-1											
EMC		IEC/EN62040-2											

Specifications are subject to change without prior notice.

Technical Specifications

MODEL	EXBR+24V	EXBR+36V	EXBR+48V	EXBR+72V
VOLTAGE	+24V	+36V	+48V	+72V
CHARGER INPUT				
Voltage Range	150~285Vac			
Frequency	50/60Hz			
Phase	Single phase with ground			
Current(A)	0.4	0.6	0.8	1.2
Protection	Resettable circuit breaker			
CHARGER OUTPUT				
Voltage (Vdc)	27.4 ± 0.3	41.1 ± 0.6	54.8 ± 0.6	82.2 ± 0.9
Current(A)	2A(Max)			
Protection	Fuse			
BATTERY				
Battery Type	12V 7AH/9AH; Sealed Valve Regulated Lead-Acid Battery (VRLA) ;Maintenance free			
Battery numbers per string	2	3	4	6
Battery string number	2			
Recharge time	8 hours to 90% capacity			
Protection	60A fast fuse			
Leakage current	<100uA			
PHYSICAL				
Dimension W×D×H (mm)	440×430×86.5		440×572×86.5	440×696×86.5
Net Weight (kg)	17.3	22.3	28.4	40.8
INDICATORS				
LED Panel	Charging LED, Battery testing LED			
ENVIRONMENT				
Operating Temperature	0～40℃			
Humidity Range	0～90% (Non-condensing)			
Noise Level	<40dB@ 1Meter			
STANDARDS				
Safety	IEC/EN62040-1			
EMC	IEC/EN62040-2			

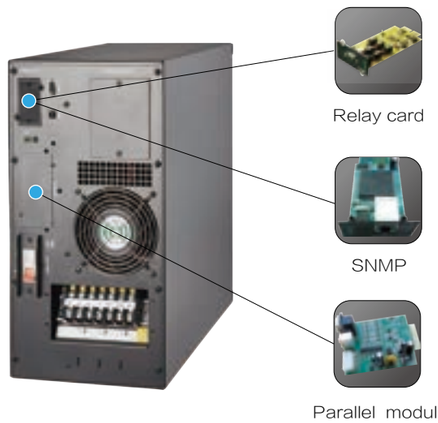
Specifications are subject to change without prior notice.

Features

- True double-conversion
- DSP technology guarantees high reliability
- N+X parallel redundancy
- Selectable quantity of battery for each group:16/18/20 pieces
- 3-stage charging design optimizes battery performance
- ECO mode operation for energy saving
- Self-diagnosis at startup
- Emergency power off function (EPO)
- Maintenance bypass (Optional) is convenient for maintenance
- Generator compatible
- Communications:RS-232,USB,SNMP card (Optional), Relay card (Optional)
- Cold start

Battery Cabinets. (Optional)

Control Panel



Rear Panel

Technical Specifications

MODEL		UB60	UB60L	UB100	UB100L
Capacity (VA/Watts)		6K / 5.4K		10K / 9K	
INPUT					
Nominal Voltage		220/230/240Vac(L+N+PE)			
Operating Voltage Range		120~276Vac			
Operating Frequency Range		50Hz：45~55Hz，60Hz：54~66Hz			
Power Factor		≥0.99			
Bypass Voltage Range		Max.voltage: 220V：+25%(Optional +10%,+15%,+20%)			
		230V：+20%(Optional +10%,+15%)			
		240V：+15%(Optional +10%)			
		Min. voltage: -45% (Optional -20%,-30%)			
ECO Range		Same as bypass			
Harmonic Distortion (THDi)		≤5%(100% non-linear load)			
OUTPUT					
Output Voltage		220/230/240Vac			
Power Factor		0.9			
Voltage Regulation		±1%			
Frequency	Line Mode	±1%/±2%/±4%/±5%/±10% of the rated frequency(Optional)			
	Bat. Mode	(50/60±0.1)Hz			
Crest Factor		3:1			
Harmonic Distortion (THDv)		≤2% with linear load			
		≤5% with non-linear load			
Waveform		Pure Sinewave			
Transfer Time		Utility to Battery : 0ms; Utility to Bypass: 0ms			
EFFICIENCY					
Efficiency		Up to 94%			
BATTERY					
Battery Voltage		Selectable Voltage: ±96/108/120Vdc			
Typical Recharge Time		6~8 hours (To 90% capacity)			
Charging Current		Maximum current 10A			
PROTECTION					
Overload	Line Mode	Load≤125%: last 5min;≤150%: last 1min;＞150% 200ms turn to bypass mode			
	Bypass Mode	40A(Input breaker)		60A(Input breaker)	
Short Circuit		Hold Whole System			
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately			
Battery Low		Alarm and Switch off			
INDICATORS					
Audible & Visual Alarms		Line Failure, Battery Low, Overload, System Fault			
Status LED & LCD Display		Line Mode, Backup Mode, Eco Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault			
Parameters On The LCD Panel		Input/Output Voltage, Input/Output Frequency, Load Level, Battery Level, Inner Temperature & Remaining Battery Backup Time			
MANAGEMENT					
Communication Interface		RS-232,USB,Parallel card(Optional), SNMP card(Optional), Relay card (Optional)			
ENVIRONMENT					
Operating Temperature		0~40℃			
Storage Temperature		-25~55℃			
Humidity Range		0~95% (Non-condensing)			
Altitude		＜1500m			
Noise Level		<55dB			
PHYSICAL					
Dimension W×D×H (mm)		250×502×616	220×481×438	250×502×616	220×481×438
Net Weight (kg)		62	18	64	20
STANDARDS					
Noise Suppression		Complies with EN62040-2			
Safety		IEC/EN62040-1,IEC/EN60950-1			
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8			
BATTERY PACK					
Model		EXB±120V			
Battery type& Max.quantity		7Ah×40/9Ah×40			
Dimensions W×D×H (mm)		250×502×616			
Net Weight (kg)		125.6/138			

Specifications are subject to change without prior notice.

Features

- True double-conversion
- Rack-mounted and floor-standing tower can be convertible
- Patented Mimic LCD of which content can be rotated according to the type of deployment
- DSP technology guarantees high reliability
- N+X parallel redundancy
- Selectable quantity of battery for each group:16/18/20 pieces
- 3-stage charging design optimizes battery performance
- ECO mode operation for energy saving
- Self-diagnosis at startup
- Emergency power off function(EPO)
- Optional PDU can be used as external maintenance bypass
- Generator compatible
- Communications:RS-232,USB,SNMP card (Optional), Relay card (Optional)

Control Panel

Battery Cabinets (Optional)

Rack-Tower convertible
Two directions LCD display

Rear Panel

Technical Specifications

MODEL		UBR60L	UBR100L
Capacity (VA/Watts)		6K / 5.4K	10K / 9K
INPUT			
Nominal Voltage		220/230/240Vac(L+N+PE)	
Operating Voltage Range		120~276Vac	
Operating Frequency Range		50Hz：45~55Hz，60Hz：54~66Hz	
Power Factor		≥0.99	
Bypass Voltage Range		Max.voltage: 220V：+25%(Optional +10%,+15%,+20%)	
		230V：+20%(Optional +10%,+15%)	
		240V：+15%(Optional +10%)	
		Min. voltage: -45% (Optional -20%,-30%)	
ECO Range		Same as bypass	
Harmonic Distortion (THDi)		≤5%(100% non-linear load)	
OUTPUT			
Output Voltage		220/230/240Vac	
Power Factor		0.9	
Voltage Regulation		±1%	
Frequency	Line Mode	±1%/±2%/±4%/±5%/±10% of the rated frequency(Optional)	
	Bat. Mode	(50/60±0.1)Hz	
Crest Factor		3:1	
Harmonic Distortion (THDv)		≤2% with linear load	
		≤5% with non-linear load	
Waveform		Pure Sinewave	
Transfer Time		Utility to Battery : 0ms; Utility to Bypass: 0ms	
EFFICIENCY			
Efficiency		Up to 94%	
BATTERY			
Battery Voltage		Optional Voltage: ±96/108/120Vdc	
Typical Recharge Time		6~8 hours (To 90% capacity)	
Charging Current		Maximum current 10A;	
PROTECTION			
Overload	Line Mode	Load≤125%: last 5min;≤150%: last 1min;＞150% 200ms turn to bypass mode	
	Bypass Mode	40A(Input breaker)	60A(Input breaker)
Short Circuit		Hold Whole System	
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately	
Battery Low		Alarm and Switch off	
INDICATORS			
Audible & Visual alarms		Line Failure, Battery Low, Overload, System Fault	
Status LED & LCD Display		Line Mode, Backup Mode, Eco Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault	
Reading On The LCD Display		Input/Output Voltage, Input/Output Frequency, Load Level, Battery Level, Inner Temperature & Remaining Battery Backup Time	
MANAGEMENT			
Communication Interface		RS232,USB, Parallel Port, SNMPcard(Optional), Relay card (Optional)	
ENVIRONMENT			
Operating Temperature		0~40℃	
Storage Temperature		-25~55℃	
Humidity Range		0~95% (Non-condensing)	
Altitude		< 1500m	
Noise Level		<55dB	
PHYSICAL			
Dimension W×D×H (mm)		443×580×131 (3U)	
Net Weight (kg)		19	20
STANDARDS			
Noise Suppression		Complies with EN62040-2	
Safety		IEC/EN62040-1,IEC/EN60950-1	
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8	
BATTERY PACK			
Model		EXBR±120V	
Battery type& Max.quantity		7Ah×20/9Ah×20	
Dimensions W×D×H (mm)		443×720×131 (3U)	
Net Weight (kg)		65/75	

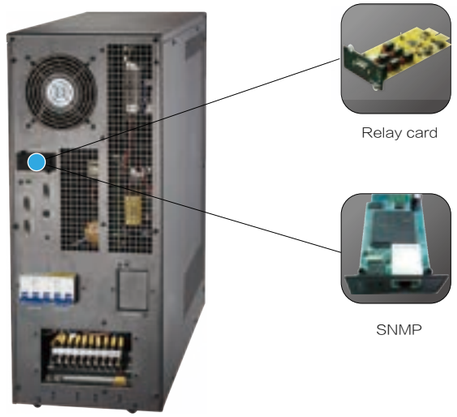
Specifications are subject to change without prior notice.

Features

- True double-conversion
- DSP technology guarantees high reliability
- N+X parallel redundancy
- Compatible with 3 phases and single phase input
- Selectable quantity of battery for each group:16/18/20 pieces
- 3-stage charging design optimizes battery performance
- ECO mode operation for energy saving
- Self-diagnosis at startup
- Emergency power off function(EPO)
- Maintenance bypass is convenient for maintenance
- Generator compatible
- Communications:RS-232,USB,Parallel card(Optional),SNMP card(Optional), Relay card (Optional) Cold start

Battery Cabinets. (Optional)

Control Panel



Rear Panel

Technical Specifications

MODEL		UC100	UC100L	UC150L	UC200L
Capacity (VA/Watts)		10K / 9K		15K / 13.5K	20K / 18K
INPUT					
Nominal Voltage		380/400/415Vac(3Ph+N+PE) or 220/230/240Vac(L+N+PE)			
Operating Voltage Range		208~478Vac or 120VAC~276Vac			
Operating Frequency Range		50Hz：45~55Hz，60Hz：54~66Hz			
Power Factor		≥0.99			
Bypass Voltage Range		Max.voltage: 220V：+25%(Optional +10%,+15%,+20%)			
		230V：+20%(Optional +10%,+15%)			
		240V：+15%(Optional +10%)			
		Min. voltage: -45% (Optional -20%,-30%)			
ECO Range		Same as bypass			
Harmonic Distortion (THDi)		≤5%(100% non-linear load)			
OUTPUT					
Rated Voltage		220/230/240Vac			
Power Factor		0.9			
Voltage Regulation		± 1%			
Frequency	Line Mode	± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency(Optional)			
	Bat. Mode	(50/60 ± 0.1)Hz			
Crest Factor		3:1			
Harmonic Distortion (THDv)		≤2% with linear load			
		≤5% with non-linear load			
Waveform		Pure Sinewave			
Transfer Time		Utility to Battery : 0ms; Utility to Bypass: 0ms			
EFFICIENCY					
Efficiency		Up to 94%		Up to 94.5%	
BATTERY					
Battery Voltage		Selectable Voltage: ±96/108/120Vdc			
Typical Recharge Time		6~8 hours (To 90% capacity)			
Charging Current		Maximum current 10A			
PROTECTION					
Overload	Line Mode	Load≤125%: last 5min;≤150%: last 1min;＞150% 200ms turn to bypass mode			
	Bypass Mode	63A(Input breaker)		100A(Input breaker)	125A(Input breaker)
Short Circuit		Hold Whole System			
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately			
Battery Low		Alarm and Switch off			
INDICATORS					
Audible & Visual Alarms		Line Failure, Battery Low, Overload, System Fault			
Status LED & LCD Display		Line Mode, Backup Mode, Eco Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault			
Parameters On The LCD Panel		Input/Output Voltage, Input/Output Frequency, Load Level, Battery Level, Inner Temperature & Remaining Battery Backup Time			
MANAGEMENT					
Communication Interface		RS-232,USB,Parallel card(Optional), SNMP card(Optional), Relay card (Optional)			
ENVIRONMENT					
Operating Temperature		0~40℃			
Storage Temperature		-25~55℃			
Humidity Range		0~95% (Non-condensing)			
Altitude		< 1500m			
Noise Level		<55dB		<58dB	
PHYSICAL					
Dimension W×D×H (mm)		250×597×655	250×502×616		
Net Weight (kg)		76	35	45	46
STANDARDS					
Noise Suppression		Complies with EN62040-2			
Safety		IEC/EN62040-1,IEC/EN60950-1			
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8			
BATTERY PACK					
Model		EXB±120V			
Battery type& Max.quantity		7Ah×40/9Ah×40			
Dimensions W×D×H (mm)		250×502×616			
Net Weight (kg)		112			

- Output factor is changed when selecting different battery quantity. 16PCS:0.7; 18PCS:0.8; 20PCS:0.9;
- Specifications are subject to change without prior notice.

Features

- True double-conversion
- Rack-mounted and floor-standing tower can be convertible
- Patented Mimic LCD of which content can be rotated according to the type of deployment
- DSP technology guarantees high reliability
- N+X parallel redundancy
- Compatible with 3 phases and single phase input
- Selectable quantity of battery for each group:16/18/20 pieces
- 3-stage charging design optimizes battery performance
- ECO mode operation for energy saving
- Self-diagnosis at startup
- Emergency power off function(EPO)
- Optional PDU can be used as external maintenance bypass
- Generator compatible
- Communications:RS-232,USB,SNMP card(Optional), Relay card (Optional)
- Cold start

Battery Cabinets (Optional)

Control Panel

Rack-Tower convertible
Two directions LCD display

Technical Specifications

MODEL		UCR60L	UCR100L
Capacity (VA/Watts)		6K / 5.4K	10K / 9K
INPUT			
Nominal Voltage		380/400/415Vac(3Ph+N+PE) or 220/230/240Vac(L+N+PE)	
Operating Voltage Range		208~478Vac or 120~276Vac	
Operating Frequency Range		50Hz：45~55Hz，60Hz：54~66Hz	
Power Factor		≥0.99	
Bypass Voltage Range		Max.voltage: 220V：+25%(Optional +10%,+15%,+20%)	
		230V：+20%(Optional +10%,+15%)	
		240V：+15%(Optional +10%)	
		Min. voltage: -45% (Optional -20%,-30%)	
ECO Range		Same as bypass	
Harmonic Distortion (THDi)		≤5%(100% non-linear load)	
OUTPUT			
Output Voltage		220/230/240Vac	
Power Factor		0.9	
Voltage Regulation		±1%	
Frequency	Line Mode	±1%/±2%/±4%/±5%/±10% of the rated frequency(Optional)	
	Bat. Mode	(50/60±0.1)Hz	
Crest Factor		3:1	
Harmonic Distortion (THDv)		≤2% with linear load	
		≤5% with non-linear load	
Waveform		Pure Sinewave	
Transfer Time		Utility to Battery : 0ms; Utility to Bypass: 0ms	
EFFICIENCY			
Efficiency		Up to 94%	
BATTERY			
Battery Voltage		Selectable Voltage: ±96/108/120Vdc	
Typical Recharge Time		6~8 hours (To 90% capacity)	
Charging Current		Maximum current 10A	
PROTECTION			
Overload	Line Mode	Load≤125%: last 5min;≤150%: last 1min;＞150% 200ms turn to bypass mode	
	Bypass Mode	40A(Input breaker)	63A(Input breaker)
Short Circuit		Hold Whole System	
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately	
Battery Low		Alarm and Switch off	
INDICATORS			
Audible & Visual Alarms		Line Failure, Battery Low, Overload, System Fault	
Status LED & LCD Display		Line Mode, Backup Mode, Eco Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault	
Parameters On The LCD Panel		Input/Output Voltage, Input/Output Frequency, Load Level, Battery Level, Inner Temperature & Remaining Battery Backup Time	
MANAGEMENT			
Communication Interface		RS-232,USB,Parallel card, SNMP card(Optional), Relay card (Optional)	
ENVIRONMENT			
Operating Temperature		0~40℃	
Storage Temperature		-25~55℃	
Humidity Range		0~95% (Non-condensing)	
Altitude		< 1500m	
Noise Level		<55dB	
PHYSICAL			
Dimension W×D×H (mm)		443×580×131(3U)	
Net Weight (kg)		30	31
STANDARDS			
Noise Suppression		Complies with EN62040-2	
Safety		IEC/EN62040-1,IEC/EN60950-1	
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8	
BATTERY PACK			
Model		EXBR±120V	
Battery type& Max.quantity		7Ah×20/9Ah×20	
Dimensions W×D×H (mm)		443×720×131(3U)	
Net Weight (kg)		67	

- Output factor is changed when selecting different battery quantity. 16PCS:0.7; 18PCS:0.8; 20PCS:0.9;
- Specifications are subject to change without prior notice.

Features

- True double-conversion
- DSP technology guarantees high reliability
- N+X parallel redundancy
- Selectable quantity of battery for each group (For long run unit)
- Adjustable charging current via LCD
- 3-stage charging design optimizes battery performance
- ECO mode operation for energy saving
- Self-diagnosis at startup
- Emergency power off function(EPO)
- Maintenance bypass is convenient for maintenance
- Generator compatible
- Communications:RS-232,RS-485,USB,SNMP card(Optional), Relay card (Optional)
- Cold start

Rear Panel

Technical Specifications

MODEL		UD10 / UD10L	UD15 / UD15L	UD20 / UD20L	UD30 / UD30L	UD40L
Capacity (VA/Watts)		10K / 9K	15K / 13.5K	20K /18K	30K /27K	40K /36K
INPUT						
Nominal Voltage		380/400/415Vac(3Ph+N+PE)				
Operating Voltage Range		208~478Vac@half load; 305~478Vac@full load				
Operating Frequency Range		50Hz：45~55Hz，60Hz：54~66Hz				
Power Factor		≥0.99				
Bypass Voltage Range		Max.voltage: 220V：+25%(Optional +10%,+15%,+20%)				
		230V：+20%(Optional +10%,+15%)				
		240V：+15%(Optional +10%)				
		Min. voltage: -45% (Optional -10%, -20%,-30%)				
ECO Range		Same as bypass				
Harmonic Distortion (THDi)		≤3%(100% non-linear load)				
OUTPUT						
Output Voltage		380/400/415Vac(3Ph+N+PE)				
Power Factor		0.9				
Voltage Regulation		±1%				
Frequency	Line Mode	±1%/±2%/±4%/±5%/±10% of the rated frequency(Optional)				
	Bat. Mode	50/60(1±0.1%)Hz				
Crest Factor		3:1				
Harmonic Distortion (THDv)		≤2% with linear load				
		≤5% with non-linear load				
Waveform		Pure Sinewave				
Transfer Time		Utility to Battery : 0ms; Utility to Bypass: 0ms				
EFFICIENCY						
Efficiency		95%				
BATTERY						
Battery Voltage	Standard unit	±120Vdc (20pcs 12V9AH)	±120Vdc (2x20pcs 12V9AH)		±120Vdc (3x20pcs 12V9AH)	N/A
	Long run unit	Selectable Voltage: ±96V/±108V/±120Vdc				Selectable Voltage: ±192V/±204V/±216V/ ±228V/±240Vdc
Charging Current (A)	Standard unit	1.35	2.7		4.05	N/A
	Long run unit	Max.current 10A			Max.current 20A	Max.current 20A
PROTECTION						
Overload	Line Mode	Load≤110%: last 60min, ≤125%: last 10min, ≤150%: last 1min, ≥150% turn to bypass mode immediately				
	Bat. Mode	Load≤110%: last 10min, ≤125%: last 1min, ≤150%: last 5S, ≥150% shut down UPS immediately				
	Bypass Mode	20A(Input breaker)	32A(Input breaker)	40A(Input breaker)	63A(Input breaker)	80A(Input breaker)
Short Circuit		Hold Whole System				
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately				
Battery Low		Alarm and Switch off				
INDICATORS						
Audible & Visual Alarms		Line Failure, Battery Low, Overload, System Fault				
Status LED & LCD Display		Line Mode, Backup Mode, Eco Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault				
Parameters On The LCD Panel		Input/Output Voltage, Input/Output Frequency, Load Level, Battery Level, Inner Temperature & Remaining Battery Backup Time				
MANAGEMENT						
Communication Interface		RS-232,RS-485,USB,Parallel card, SNMP card(Optional), Relay card (Optional),Battery temperature sentor(optional)				
ENVIRONMENT						
Operating Temperature		0~40℃				
Storage Temperature		-25~55℃				
Humidity Range		0~95% (Non-condensing)				
Altitude		<1500m				
Noise Level		<55dB			<58dB	<70dB
PHYSICAL						
Dimension W×D×H (mm)		250x828x868				
Net Weight (kg)		115/57	170/63	171/64	223/71	73
STANDARDS						
Noise Suppression		Complies with EN62040-2				
Safety		IEC/EN62040-1,IEC/EN60950-1				
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8				

Specifications are subject to change without prior notice.