

**OPTI-UPS**®  
Protect and Serve

# OPTI-UPS Catalogue



[www.opti-ups.com](http://www.opti-ups.com)



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## Introduction

OPTI-UPS was established in 1991. The company was under the ViewSonic group initially and independent later for higher brand value. With enthusiasm to serve, we always place customer satisfaction as our priority. The acquisition of ISO 9001 certification and production over wide range of UPS models has been the two approaches used to achieve such goal. All products are designed with features of user-friendly installation and extended run times for wider applications.

In order to serve our customers with greater efficiency, OPTI-UPS has set up branch offices worldwide, which cover USA, Europe, Australia, Taiwan and Dubai, as well as logistic facilities in Holland, Dubai and USA.

OPTI-UPS has adopted two major business models, namely marketing distribution of the brand name "OPTI-UPS" on a worldwide scale and provision of customized OEM / ODM products for other brands. With 20 years of experience in the industry, OPTI-UPS is now an international brand, of well reputation, serving an increasing demand for power protection products worldwide.

OPTI-UPS constantly re-invests in the R&D (Research & Development) for boost of production capacity since it induces innovative and top products under modern technologies. All products comply with industrial safety codes and regional requirements. After success on the US, European and Australian markets, we are now focusing on the Middle East and African markets.

## Mission Statement

- Establishment of brand awareness worldwide
- Provision of products and services at best quality
- Long-term cooperation with customers globally

## Core Values

### Openness and Optimism

Willingness for discussion and work with all people and industries under positive thinking

### Professionalism and Progressiveness

Immediate response to market demands and customers' requirements

### Trust and Teamwork

Trust and thought sharing with others under grace

### Initiative and Innovation

Proactive discovery of new ideas and technical solutions



## Major Milestones

- 1996** Progressive establishment of steady, globally well-known OEM customers.
- 1997** Establishment of OPTI-UPS USA in California together with qualification for ISO 9001 certificates for UPS products and Switching Power Supplies (SPS).
- 1998** More distribution of our products throughout USA via IngramMicro, TechData and ASI.
- 2001** Establishment of OPTI-UPS Australia to satisfy vast demands in Oceanic region.
- 2002** OPTI-UPS became one of the top three brand names for UPS products in Australia.
- 2003** Government tender from the Ministry of Education in Turkey is won providing market opportunities in the neighboring countries such as Iran and other countries of the Middle East region.
- 2004** Establishment of logistic operations in Holland and commencement of speedy delivery to pan- European customers.
- 2005** Expansion with logistic regional office in Dubai to serve Middle East, North Africa and Central Asian markets.
- 2006** Set up of Dubai branch office in Jebel Ali Free Zone to cater for Middle East & Africa market.
- 2007** Launch of OPTI-Solar product line.
- 2008** Set up of China purchasing office in Shenzhen, China to enhance interaction with China market.
- 2009** Formal acquisition of OPTI-Solar trade mark in Europe, USA, United Arab Emirates, China and Taiwan.
- 2010** Establishment of pan-European service center in Germany.
- 2011** Establishment of a European branch office in Holland.

## Dedicated Technical Support

In general, most of our UPS systems are plug-and-play devices; yet for high level application or special customization, estimation of load requirements and backup time must be accurately done. Further to mere delivery of goods, we guide customers from formulation of their demand and installation to maintenance of a power supply system. For after-sale support, we provide thorough and prompt services in consultation, configuration, maintenance and repair. Moreover, we conduct regular product updates and technical seminars to benefit our partners.

Our confidence in superior quality and more than 20 years of solid achievements have satisfied customers worldwide with continuous growth for all parties every year. Furthermore, we provide 2-year warranty on both UPS products and internal batteries, which contains various extension programs from OPTI-UPS directly or local partners worldwide.

## Quality Assurance

Quality assurance is our commitment to ensure maximum performance of products to customers. This is achieved by adhering to our technical specifications for maintenance of high quality over the production lines paired with stringent inspections, namely the fully-auto error detection, correction and extensive tests. With the highly advanced test equipment and latest technologies used at our assembly lines, we are proud to claim ourselves as most reputable UPS manufacturer.

At OPTI-UPS, not only we make lasting products, but also the lasting relationships with customers.



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*Your Valued Choice of Intelligent UPS*



# Value Series

The VSC Series are perfect for your personal and small office computers. They protect systems against blackouts, sags, and surges. The smallest and lightest in its class, this high frequency and high efficiency UPS provides complete protection for a workstation and its peripherals.



VS375C  
VS575C



VS400C  
VS600C

## VS375C / VS400C / VS575C / VS600C

### Features

- 3 UPS outlets + 3 surge protected outlets
- Integrated protection for telephone / modem / LAN card
- Cold start capability
- 1050 Joules surge energy rating
- RS232 communication port
- Easy battery replacement
- 4 hours recharge time
- Smart power management software
- Auto restart & self-diagnostics

### Specifications

Model Name	VS375C / VS400C	VS575C / VS600C
<b>Topology</b>	Standby, High Frequency	
<b>On-battery Output Waveform</b>	Simulated Sine Wave	
<b>Maximum Capacity (VA / W)</b>	375VA / 225W	575VA / 345W
<b>INPUT</b>		
<b>Nominal Input Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*	
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing	
<b>Input Voltage Range</b>	Rated Voltage $\pm 20\%$	
<b>OUTPUT</b>		
<b>Nominal Output Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*	
<b>Output Voltage Regulation</b>	Rated Voltage $\pm 5\%$ (on battery)	
<b>Transfer Time (Typical)</b>	4 ms	
<b>Start on Battery</b>	Yes	
<b>Auto Restart</b>	Yes	
<b>Number of Outlets</b>	3 Battery Backup + 3 Surge Protection (NEMA 15A) 3 Battery Backup + 3 Surge Protection (IEC 10A)	
<b>PROTECTION</b>		
<b>Data Line Surge Protection</b>	RJ11 / RJ45	
<b>Surge Energy Rating</b>	1050 Joules	
<b>Overload Protection</b>	UPS shuts down at 110% load after 20 secs or 130% load after 3 secs	
<b>Over Current Protection</b>	Fuse	
<b>Discharge Protection</b>	Keylock	
<b>BATTERY</b>		
<b>Configuration</b>	12V (12V 3AH $\times$ 1)	12V (12V 3.8AH $\times$ 1)
<b>Typical Backup Time**</b>	7~12 min	10~15 min
<b>Recharge Time to 90% (Typical)</b>	< 4 Hours	
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>		
<b>Front Panel</b>	Power Status / AC Mode / Battery Mode / Battery Fault / Overload	
<b>Audible Alarms</b>	Battery Mode / Battery Low / Battery Fault / Overload	
<b>COMMUNICATION INTERFACE</b>		
<b>Communication Port***</b>	RS232	
<b>ENVIRONMENTAL</b>		
<b>Operation Temperature</b>	0~40°C / 32~104°F	
<b>Storage Temperature</b>	-25~55°C / -13~131°F	
<b>Relative Humidity</b>	0~95% Non condensing	
<b>Audible Noise</b>	< 40 dBA	
<b>PHYSICAL</b>		
<b>Dimensions</b>	Physical / Packing (in)	7.9 $\times$ 3 $\times$ 6.9 / 9.6 $\times$ 5 $\times$ 9.8
	L $\times$ W $\times$ H (mm)	200 $\times$ 77 $\times$ 175 / 248 $\times$ 127 $\times$ 250
<b>Weight (Net / Gross)</b>	lbs	5.1 / 6.4
	kg	2.3 / 2.9
<b>CONFORMANCE</b>		
<b>Approvals</b>	UL / cUL, CE, GOST-R	

Specifications are subject to change without notice.

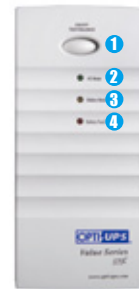
\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

\*\* Typical backup time represents backup time for load equivalent to one PC and one 15" LCD monitor. Values here are for reference only.

\*\*\* You can purchase RS232 to USB cable.

### Front Panel

VS375C / VS575C

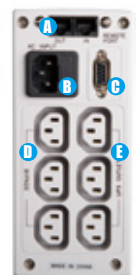


- 1 On / OFF Test / Silence
- 2 AC Mode
- 3 Battery Mode
- 4 Battery Fault

### Rear Panel



100V  
110V  
120V



220V  
230V  
240V

- A RJ45 / RJ11
- B AC Input
- C RS232
- D Bypass Outlets
- E UPS Outlets



For Mac OS support please purchase the RS232 to USB cable.

PC & WORKSTATION

SOHO & WORKSTATION

NETWORK & SERVER

DATA CENTER & FACILITY

SOFTWARE

HOME & OFFICE  
APPLIANCES

FACTORY & AUTOMATION  
EQUIPMENT

# Thunder Shield Series



TS650B

TS1250B

**TS400 / TS500 / TS500B / TS650 / TS650B / TS1000 / TS1000B / TS1250 / TS1250B / TS1700 / TS1700B / TS2250 / TS2250B**

Voltage and frequency fluctuations, surges, sags and power cuts are likely to seriously damage your sensitive equipment. These problems occur every day all over the world and are more frequent in areas with overloaded power grid systems.

The TS Series are the ideal solution to protect your small office and home office systems (SOHO), as well as other electronic devices, which are needed for daily use. Not only is TS a great value for your money but also is the UPS that is extremely easy to handle. TS fulfills the requirements of many types of users.

With their built-in batteries, most UPS products can do their jobs. However, the batteries would soon deteriorate if used often. This is where the OPTI-UPS TS Series rise above the others. With their wide range AVR, battery usage is limited to very extreme conditions while normal voltage fluctuations are easily controlled by the UPS. When things get tough on the utility source, the TS Series product line is there to give the right amount of battery backup.

The TS Series product line is your insurance to continuous performance and peace of mind!

## Features

- Line interactive design
- Boost and buck AVR (Auto Voltage Regulation)
- Fully digitized microprocessor control
- Energy saving function (UPS green mode)
- 50 / 60 Hz frequency auto sensing and selection
- Cold start function (DC power on)
- Short circuit and overload protection
- RS232 communication port
- Tel / Modem / LAN surge protection
- History record of power failure events
- Smart power management software
- Scheduled shutdown & reboot
- Generator compatible (Features of TSB models only)



For Mac OS support please purchase the RS232 to USB cable.

# Thunder Shield Series

TS400 / TS500 / TS500B / TS650 / TS650B / TS1000 / TS1000B / TS1250 / TS1250B / TS1700 / TS1700B / TS2250 / TS2250B

## Front Panel

TS400 / TS500 / TS500B / TS650 / TS650B / TS1000 / TS1000B / TS1250 / TS1250B / TS1700 / TS1700B / TS2250 / TS2250B



- 1 Audible Alarm
  - Mains fault
  - Battery low
  - Overload
  - Battery fault
- 2 LED
  - AC mode (LED is on)
  - Battery mode (LED flashes slowly)
  - Battery fault (LED flashes rapidly)
  - Overload (LED flashes rapidly)
- 3 ON/OFF/Test/Mute button

## Rear Panel

TS2250B US



110V  
120V

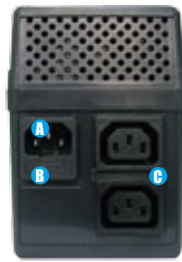
- A Input
- B UPS Output
- C Communication Port
- D Data Line Protection
- E Circuit Breaker

## Rear Panel

TS400 / TS500 / TS650 / TS1000



110V  
120V



220V  
230V  
240V

TS500B / TS650B / TS1000B



110V  
120V



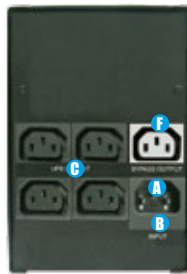
220V  
230V  
240V

- A Input
- B Fuse
- C UPS Output
- D Communication Port
- E Data Line Protection

TS1250



110V  
120V

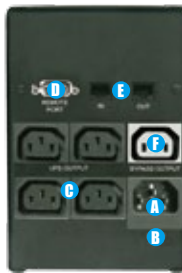


220V  
230V  
240V

TS1250B



110V  
120V



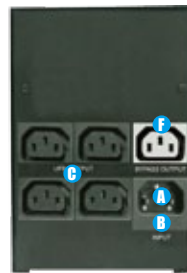
220V  
230V  
240V

- A Input
- B Fuse
- C UPS Output
- D Communication Port
- E Data Line Protection
- F Bypass Output
- G Circuit Breaker

TS1700 / TS2250



110V  
120V

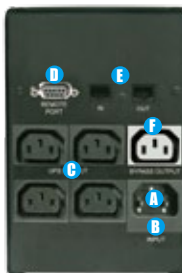


220V  
230V  
240V

TS1700B / TS2250B IEC



110V  
120V



220V  
230V  
240V

- A Input
- B Fuse
- C UPS Output
- D Communication Port
- E Data Line Protection
- F Bypass Output (UPS Output for TS2250 / TS2250B)
- G Circuit Breaker

# Thunder Shield Series

## TS400 / TS500 / TS500B / TS650 / TS650B

### Specifications

Model Name	TS400	TS500	TS500B	TS650	TS650B
Topology	Line-Interactive, Low Frequency				
On-battery Output Waveform	Simulated Sine Wave				
Maximum Capacity (VA / W)	400VA / 240W	500VA / 300W		600VA / 360W	
<b>INPUT</b>					
Nominal Input Voltage	110 / 120Vac or 220 / 230 / 240Vac <sup>(1)</sup>				
Nominal Input Frequency	50Hz / 60Hz Auto Sensing				
Input Voltage Range	Rated Voltage $\pm 25\%$				
<b>OUTPUT</b>					
Nominal Output Voltage	110 / 120Vac or 220 / 230 / 240Vac <sup>(1)</sup>				
Output Voltage Regulation	Rated Voltage $\pm 5\%$ (on battery)				
Transfer Time(Typical)	2~4 ms				
Start on Battery	Yes				
Auto Restart	Yes				
Automatic Voltage Regulation (AVR)	AVR increases the output voltage by 15% while the input voltage decreases by 9 % to 25 % AVR decreases the output voltage by 13% while the input voltage increases by 9 % to 25 %				
Number of Outlets	2 Battery backup outlets (IEC 10A) 2 Battery backup outlets (NEMA 15A)				
<b>PROTECTION</b>					
Data Line Surge Protection	None	RJ11 / RJ45 <sup>*1</sup>			
Surge Energy Rating	460 Joules(IEC models), 265 Joules(NEMA models)				
Overload Protection	UPS shuts down at 110% load after 60 secs or 130% load after 3 secs				
Over Current Protection	Fuse				
Discharge Protection	Keylock				
<b>BATTERY</b>					
Configuration	12V (12V 4.5AHx1)	12V (12V 7.2AHx1)			
Typical Backup Time**	15 min	19 min		17 min	
Recharge Time to 90% (Typical)	< 4 Hours				
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>					
Front Panel	AC Mode / Battery Mode / Battery Fault / Overload				
Audible Alarms	Battery Mode / Battery Low / Overload				
<b>COMMUNICATION INTERFACE</b>					
Communication Port	None	RS232 <sup>*2</sup>			
<b>ENVIRONMENTAL</b>					
Operation Temperature	0~40°C / 32~104°F				
Storage Temperature	-20~60°C / -4~140°F				
Relative Humidity	0~95% Non condensing				
Audible Noise	< 40 dBA				
<b>PHYSICAL</b>					
Dimensions	Physical / Packing (in)	10.2x3.8x5.3 / 11.8x5.5x8.6	12.5x3.8x5.3 / 14.3x5.5x8.7		
	LxWxH (mm)	260x97x135 / 299x139x218	320x97x135 / 364x139x220		
Weight (Net / Gross)	(lbs)	9.2 / 10.1	13.9 / 15.0		14.3 / 15.4
	(kg)	4.2 / 4.6	6.3 / 6.8		6.5 / 7.0
<b>CONFORMANCE</b>					
Approvals	UL / cUL, CE, GOST-R				

Specifications are subject to change without notice.

\*1 TS-B models only.

\*2 TS-B models only. You can purchase RS232 to USB cable.

<sup>(1)</sup> Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable. E.g. a model with the factory setting for 230Vac can only work in the countries with 230Vac power and won't work in the countries with 110Vac power, and 110Vac model can only work in the countries with 110Vac power, not in the countries with 230Vac power.

\*\* Typical backup time represents backup time for load equivalent to one PC and one 15" LCD monitor. Values here are for reference only.



For Mac OS support please purchase the RS232 to USB cable.

# Thunder Shield Series

TS1000 / TS1000B / TS1250 / TS1250B / TS1700 / TS1700B / TS2250 / TS2250B

## Specifications

Model Name	TS1000	TS1000B	TS1250	TS1250B	TS1700	TS1700B	TS2250	TS2250B
<b>Topology</b>	Line-Interactive, Low Frequency							
<b>On-battery Output Waveform</b>	Simulated Sine Wave							
<b>Maximum Capacity (VA / W)</b>	800VA / 480W		1000VA / 600W		1500VA / 900W		2000VA / 1200W	
<b>INPUT</b>								
<b>Nominal Input Voltage</b>	110 / 120 or 220 / 230 / 240Vac <sup>(1)</sup>							
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing							
<b>Input Voltage Range</b>	Rated Voltage $\pm$ 25%							
<b>OUTPUT</b>								
<b>Nominal Output Voltage</b>	110 / 120 or 220 / 230 / 240Vac <sup>(1)</sup>							
<b>Output Voltage Regulation</b>	Rated Voltage $\pm$ 5% (on battery)							
<b>Transfer Time(Typical)</b>	4 ms							
<b>Start on Battery</b>	Yes							
<b>Auto Restart</b>	Yes							
<b>Automatic Voltage Regulation (AVR)</b>	AVR increases the output voltage by 15% while the input voltage decreases by 9 % to 25 % AVR decreases the output voltage by 13% while the input voltage increases by 9 % to 25 %							
<b>Number of Outlets</b>	2 Battery backup + 1 Bypass (IEC 10A) 2 Battery backup + 1 Bypass (NEMA 15A)		4 Battery backup + 1 Bypass (IEC 10A) 4 Battery backup + 1 Bypass (NEMA 15A)		4 Battery backup + 1 Bypass (IEC 10A) 5 Battery backup (NEMA 15A)		5 Battery backup (IEC 10A) 5 Battery backup (NEMA 15A)	
<b>PROTECTION</b>								
<b>Data Line Surge Protection</b>	RJ11 / RJ45 <sup>†1</sup>							
<b>Surge Energy Rating</b>	220 / 230 / 240Vac 460 Joules(IEC models), 110 / 120 Vac TS1000 / TS1000B 265 Joules (NEMA models) TS1250 / TS1250B, TS1700 / TS1700B, TS2250 / TS2250B 1185 Joules (NEMA modules)							
<b>Overload Protection</b>	UPS shuts down at 110% load after 60 secs or 130% load after 3 secs							
<b>Over Current Protection</b>	Fuse (Circuit breakers for TS1250 / 1700 models with NEMA outlets)							
<b>Discharge Protection</b>	Keylock							
<b>BATTERY</b>								
<b>Configuration</b>	12V (12V 34W×1)		24V (12V 7.2AH×2)			24V (12V 34W×2)		
<b>Typical Backup Time**</b>	33 min		42 min			45 min		
<b>Recharge Time to 90% (Typical)</b>	< 4 Hours							
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>								
<b>Front Panel LEDs</b>	AC Mode / Battery Mode / Battery Fault / Overload							
<b>Audible Alarms</b>	Battery Mode / Battery Low / Overload							
<b>COMMUNICATION INTERFACE</b>								
<b>Communication Port</b>	RS232 <sup>‡2</sup>						RS232 <sup>‡2</sup> for 220 / 230 / 240V models USB <sup>†1</sup> for 110 / 120V models	
<b>ENVIRONMENTAL</b>								
<b>Operation Temperature</b>	0~40°C / 32~104°F							
<b>Storage Temperature</b>	-20~60°C / -4~140°F							
<b>Relative Humidity</b>	0~95% Non condensing							
<b>Audible Noise</b>	< 40 dBA							
<b>PHYSICAL</b>								
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	12.5×3.8×5.3 / 14.3×5.5×8.7		15×5.1×7.5 / 19.1×9.6×12.2				
	<b>L×W×H (mm)</b>	320×97×135 / 364×139×220		382×130×192 / 485×244×310				
<b>Weight (Net / Gross)</b>	<b>lbs</b>	14.7 / 15.9		28.6 / 32.6		35.0 / 38.0		
	<b>kg</b>	6.7 / 7.2		13.4 / 14.8		15.9 / 17.3		
<b>CONFORMANCE</b>								
<b>Approvals</b>	UL / cUL, CE							

Specifications are subject to change without notice.

<sup>†1</sup> TS-B models only.

<sup>‡2</sup> TS-B models only. You can purchase RS232 to USB cable.

(1!) Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable. E.g. a model with the factory setting for 230Vac can only work in the countries with 230Vac power and won't work in the countries with 110Vac power, and 110Vac model can only work in the countries with 110Vac power, not in the countries with 230Vac power.

\*\* Typical backup time represents backup time for load equivalent to one PC and one 15" LCD monitor. Values here are for reference only.



For Mac OS support please purchase the RS232 to USB cable.

PC & WORKSTATION

SOHO & WORKSTATION

NETWORK & SERVER

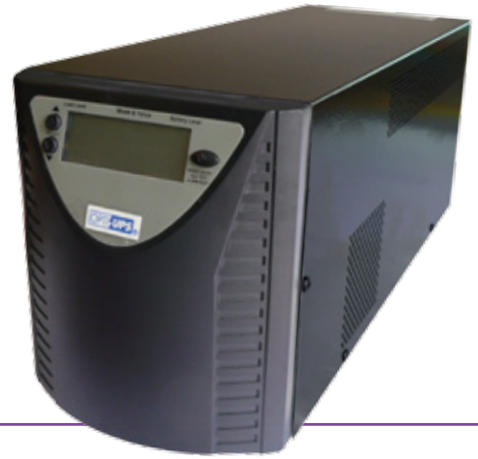
DATA CENTER & FACILITY

SOFTWARE

HOME & OFFICE  
APPLIANCES

FACTORY & AUTOMATION  
EQUIPMENT

# Innovative Series



## IS1100LT / IS2200LT / IS3000LT / IS5000LT

### Features

- Smart backup time estimation for any kind of battery
- Adjustable voltage sensitivity
- Adjustable voltage-transfer points
- Adjustable charging voltage
- Generator compatible
- Automatic restart
- Smart AVR function (Two buck / boost modes)
- Intelligent double stage charging control, wet battery compatible
- Audible alarm
- Hot-swappable batteries for rack-mount models
- Network manageable (SNMP optional)
- Full function LCD or LED display
- Smart battery management
- Cold-start capable
- Thermal control cooling fan

### Specifications

Model Name	IS1100LT	IS2200LT	IS3000LT	IS5000LT	
<b>Topology</b>	Line-Interactive, Low Frequency				
<b>On-battery Output Waveform</b>	Pure Sine wave				
<b>Maximum Capacity</b>	1100VA / 660W	2200VA / 1350W	3000VA / 1800W	5000VA / 3200W	
<b>INPUT</b>					
<b>Nominal Input Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			220 / 230 / 240Vac	
<b>Nominal Input Frequency</b>	50 / 60 Hz Auto-sensing				
<b>Input Voltage Range</b>	Rated Voltage -20%~+22%				
<b>OUTPUT</b>					
<b>Nominal Output Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			220 / 230 / 240Vac	
<b>Output Voltage Regulation</b>	Rated Voltage $\pm 3\%$ (on battery)				
<b>Transfer Time (Typical)</b>	4 ms				
<b>Automatic Voltage Regulation (AVR)</b>	Yes				
<b>Start on battery</b>	Yes				
<b>Auto Restart</b>	Yes				
<b>Number of Outlets</b>	6 Battery backup (NEMA 15A) (100 / 110 / 120Vac) 6 Battery backup (IEC 10A) (220 / 230 / 240Vac)			3 Battery backup (IEC 10A) + 1 Terminal	
<b>PROTECTION</b>					
<b>Data Line Surge Protection</b>	RJ45				
<b>Surge Energy Rating</b>	220 Joules	440 Joules	660 Joules	660 Joules	
<b>Over Current Protection</b>	Circuit Breaker / Fuse				
<b>Discharge Protection</b>	Keylock				
<b>BATTERY</b>					
<b>Configuration</b>	24V / 48V (optional)	48V / 24 & 36V (optional)	72V / 24 & 36 & 48V (optional)	48V	
<b>Backup Time (Full / Half load)**</b>	Depends on overall battery capacity				
<b>Recharge Time to 90% (Typical)</b>	Depends on overall battery capacity				
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>					
<b>Front Panel</b>	Load / Battery / Operation				
<b>Audible Alarms</b>	Battery Low / Battery Over Voltage / Overload / Overheat / Short Circuit Current				
<b>COMMUNICATION INTERFACE</b>					
<b>Communication Port</b>	RS232 (USB port is optional)				
<b>ENVIRONMENTAL</b>					
<b>Operation Temperature</b>	0~40°C / 32~104°F				
<b>Storage Temperature</b>	-15~55°C / 5~131°F				
<b>Relative Humidity</b>	0~95% Non condensing				
<b>Audible Noise</b>	$\leq 50$ dBA				
<b>PHYSICAL</b>					
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	17.6×7.8×7 / 21×11.7×12.9			
	<b>L×W×H (mm)</b>	447×198×178 / 533×327.7×297.2			
<b>Weight (Net / Gross)</b>	<b>lbs</b>	33.1 / 35.3	42 / 44.2	50.8 / 53	88.4 / 92.8
	<b>kg</b>	15 / 16	19 / 20	23 / 24	40 / 42

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

\*\* Backup time depends on the battery packs (capacities) requested.

### Front Panel



- 1 Selection Button for mode & value
- 2 LCD Screen
- 3 Main Control Button

### Rear Panel

#### IS5000LT



- A RS-232 Interface port
- B Output
- C Data-line protection (RJ-45, Optional)
- D Input
- E Circuit Breaker
- F Extended Battery
- G Connector
- H USB port (Optional)



# Innovative Series



PC & WORKSTATION

SOHO & WORKSTATION

NETWORK & SERVER

DATA CENTER & FACILITY

SOFTWARE

HOME & OFFICE  
APPLIANCES

FACTORY & AUTOMATION  
EQUIPMENT

## IS2000LR / IS2700LR / IS4000LR / IS5000LR

### Features

- Generator compatible
- Automatic restart
- Smart AVR function (Two buck / boost modes)
- Smart backup time estimation for any kind of battery
- Adjustable voltage sensitivity, voltage-transfer points, & charging voltage
- Intelligent double staged charging control. Wet battery compatible
- Cold-start capable
- Audible alarm
- Network manageable (SNMP optional)
- Full function LCD display
- Smart battery management
- Thermal control cooling fan

### Specifications

Model Name	IS2000LR	IS2700LR	IS4000LR	IS5000LR
<b>Topology</b>	Line-Interactive, Low Frequency			
<b>On-battery Output Waveform</b>	Pure Sine wave			
<b>Maximum Capacity</b>	2000VA / 1250W	2700VA / 1700W	4000VA / 2500W	5000VA / 3200W
<b>INPUT</b>				
<b>Nominal Input Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			220 / 230 / 240Vac
<b>Nominal Input Frequency</b>	50 / 60 Hz Auto-sensing			
<b>Input Voltage Range</b>	Rated Voltage -20% ~+22%			
<b>OUTPUT</b>				
<b>Nominal Output Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			220 / 230 / 240Vac
<b>Output Voltage Regulation</b>	Rated Voltage ±3%(on battery)			
<b>Transfer Time (Typical)</b>	4 ms			
<b>Automatic Voltage Regulation (AVR)</b>	Yes			
<b>Start on battery</b>	Yes			
<b>Auto Restart</b>	Yes			
<b>Number of Outlets</b>	1 x 3P Terminal + 1 Battery backup (IEC 10A)			
<b>PROTECTION</b>				
<b>Surge Energy Rating</b>	440 Joules	440 Joules	660 Joules	660 Joules
<b>Over Current Protection</b>	Circuit Breaker / Fuse			
<b>Discharge Protection</b>	Keylock			
<b>BATTERY</b>				
<b>Configuration</b>	48V / 24V(optional)		48V / 72V(optional)	
<b>Backup Time (Full / Half load)**</b>	Depends on overall battery capacity			
<b>Recharge Time to 90% (Typical)</b>	Depends on overall battery capacity			
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>				
<b>Front Panel</b>	Load / Battery / Operation			
<b>Audible Alarms</b>	Battery Low / Battery Over Voltage / Overload / Overheat / Short Circuit Current			
<b>COMMUNICATION INTERFACE</b>				
<b>Communication Port</b>	RS232 (USB port is optional)			
<b>ENVIRONMENTAL</b>				
<b>Operation Temperature</b>	0~40°C / 32~104°F			
<b>Storage Temperature</b>	-15~55°C / 5~131°F			
<b>Relative Humidity</b>	0~95% Non condensing			
<b>Audible Noise</b>	≤40dBA			
<b>PHYSICAL</b>				
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	17.6×17.6×5.2 / 23×23×12.9		18.7×18.7×6.9 / 25×23.4×15.6
	<b>L×W×H (mm)</b>	447×447×132 / 584×584×327.7		475×475×176 / 635×594.3×396
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	57.5 / 66.3	57.5 / 66.3	75.1 / 84
	<b>(kg)</b>	26 / 30	26 / 30	34 / 38

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

\*\* Backup time depends on the battery packs (capacities) requested.



# Enhanced Series



ES800C

ES1500C

## Protection for small electronic equipment

The ESC series offer the highest power capacity and the best equipment protection around. Not only do they protect against blackouts, sags and surges, but with the added feature of AVR (Automatic Voltage Regulator), these UPS products ensure that only clean and safe currents reach your equipment.

## What is AVR?

AVR is a feature that corrects under and over voltages without draining the battery, thus providing extended battery life and most important, allowing the UPS to provide high quality power during unacceptable voltage fluctuations.

## ES550C / ES800C / ES1000C / ES1500C

### Features

- AVR (automatic voltage regulator)
- Up to 8 battery backup outlets
- RJ11 / RJ45 protection
- Easy battery replacement procedure
- 1050 Joules surge energy rating
- 4 hours battery recharge time
- Smart power management software

### Specifications

Model Name	ES550C	ES800C	ES1000C	ES1500C
<b>Topology</b>	Line-Interactive, Low Frequency			
<b>On-battery Output Waveform</b>	Simulated Sine Wave			
<b>Maximum Capacity</b>	550VA / 330W	800VA / 480W	1000VA / 700W	1400VA / 980W
<b>INPUT</b>				
<b>Nominal Input Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing			
<b>Input Voltage Range</b>	Rated Voltage $\pm 25\%$			
<b>OUTPUT</b>				
<b>Nominal Output Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			
<b>Output Voltage Regulation</b>	Rated Voltage $\pm 5\%$ (on battery)			
<b>Transfer Time (Typical)</b>	4 ms			
<b>Automatic Voltage Regulation (AVR)</b>	Yes			
<b>Start on battery</b>	Yes			
<b>Auto Restart</b>	Yes			
<b>Number of Outlets</b>	3 Battery Backup + 3 Surge Protection (NEMA 15A) 3 Battery Backup + 2 Surge Protection (IEC 10A)	8 Battery Backup (NEMA 15A) 8 Battery Backup (IEC 10A)		
<b>PROTECTION</b>				
<b>Data Line Surge Protection</b>	RJ11 / RJ45			
<b>Surge Energy Rating</b>	1050 Joules			
<b>Overload Protection</b>	UPS shuts down at 110% load after 20 secs or 130% load after 3 secs			
<b>Over Current Protection</b>	Circuit Breaker (NEMA), Fuse (IEC)	Circuit Breaker		
<b>Discharge Protection</b>	Keylock			
<b>BATTERY</b>				
<b>Configuration</b>	12V (12V 7.2AH*1)	12V (12V 34W*1)	12V (12V 7.2AH*2)	12V (12V 34W*2)
<b>Typical Backup Time**</b>	21 min	33 min	40 min	45 min
<b>Recharge Time to 90% (Typical)</b>	< 4 Hours			
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>				
<b>Front Panel</b>	AC Mode / Battery Mode / Battery Fault		AC Mode / Battery Mode / Battery Fault / Boost / Buck	
<b>Audible Alarms</b>	Battery Mode / Battery Fault / Overload			
<b>COMMUNICATION INTERFACE</b>				
<b>Communication Port***</b>	RS232			
<b>ENVIRONMENTAL</b>				
<b>Operation Temperature</b>	0~40°C / 32~104°F			
<b>Storage Temperature</b>	-20~60°C / -4~140°F			
<b>Relative Humidity</b>	0~95% Non condensing			
<b>Audible Noise</b>	< 40 dBA			
<b>PHYSICAL</b>				
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	12.7×4×6.5 / 16.1×7.7×10.6		14.9×5.5×7.9 / 19.2×10.6×12.8
	<b>L×W×H (mm)</b>	322×102×165 / 410×195×268		378×140×201 / 487×270×326
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	14.1 / 16.1		31.1 / 33.3
	<b>(kg)</b>	6.4 / 7.3		14.1 / 15.1
<b>CONFORMANCE</b>		UL / cUL, CE, GOST-R		

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

\*\* Typical backup time represents backup time for load equivalent to one PC and one 15" LCD monitor. Values here are for reference only.

\*\*\* You can purchase RS232 to USB cable.

### Front Panel

#### ES550C / ES800C



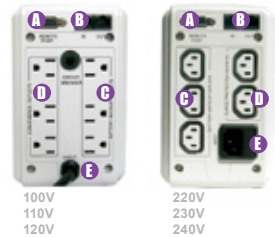
#### ES1000C / ES1500C



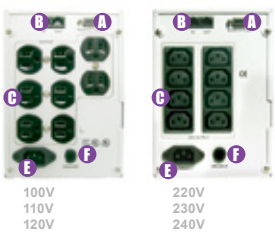
- 1 Battery Fault
- 2 Battery Mode
- 3 AC Mode
- 4 On / Off, Test / Silence
- 5 Buck
- 6 Boost

### Rear Panel

#### ES550C / ES800C



#### ES1000C / ES1500C



- A Communication Port
- B Data Line Protection
- C Battery Backup Outlets
- D Surge Protected Outlets
- E Input
- F Breaker



For Mac OS support please purchase the RS232 to USB cable.

# Power Series



\* PS800B



\* PS1000B / PS1500B / PS2200B / PS3000B

## PS800B / PS1000B / PS1500B / PS2200B / PS3000B

The Power Series are the line interactive pure sinewave UPS designed to meet everyone's needs. The full range capacity covers every possible application demand (from 800VA to 10KVA).

Every Power Series model utilizes digital line interactive technology that incorporates AVR.

AVR is an Automatic Voltage Regulator that Stabilizes all currents from over and under voltages, so that only the most clean and safe currents feed into your equipment.

Every single model is equipped with our full version of OPTI-SAFE control software.

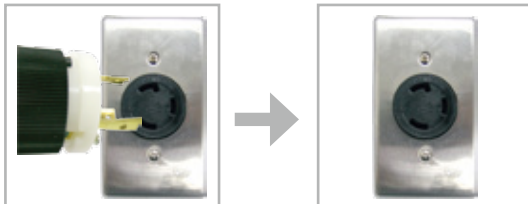
Sine wave represents energy entirely concentrated at a single frequency. The more concentrated the energy is the cleaner and safer the current will be. Fluctuations in energy called sags, brownouts and spikes, are harmful to machines and systems.

### Features

- Pure sine wave
- LCD display panel (PS1000B~3000B)
- Software controlled outlets to switch power on / off (PS1000~3000B)
- Higher efficiency
- 4 hours battery recharge time
- 1050 Joules surge energy rating
- Up to 8 battery backup outlets
- RS232 or USB (optional) connectivity
- Cold start from battery
- Smart power management software

### Details

#### Optional



High capacity UPS like PS2200B / 3000B, PS2200B-RM / 3000B-RM(100V, 110V, 120V) when working with loads close to their maximum capacity, would draw high current from the AC source outlets. This is why these UPS models are equipped with high current power plugs NEMA L5-30P. Assuming that the user might not have such socket available OPTI-UPS bundles the NEMA L5-30R receptacles with PS2200B and PS3000B products

### Front Panel

#### PS800B



- 1 Test, Silence
- 2 On / Off
- 3 Normal
- 4 Battery

#### PS1000B / PS1500B / PS2200B / PS3000B



- 1 On, Test
- 2 Off
- 3 Select

# Power Series

PS800B / PS1000B / PS1500B / PS2200B / PS3000B

## Rear Panel

### PS800B



- A** Battery Backup Outlets
- B** Input
- C** Data Line Protection
- D** Communication port
- E** DIP Switch
- F** Circuit Breaker

## PS800B Output Voltage

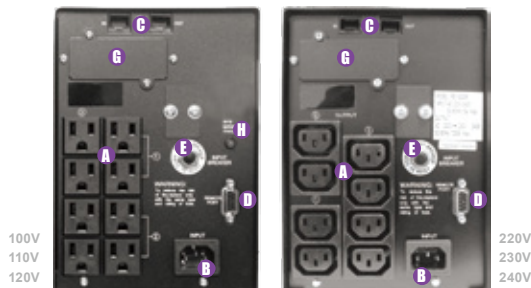
100V / 110V / 115V / 120V

1	ON: DC Start enabled			
2	ON: Green mode function enabled			
	100V	110V	115V	120V
3	ON	ON	OFF	OFF
4	ON	OFF	ON	OFF

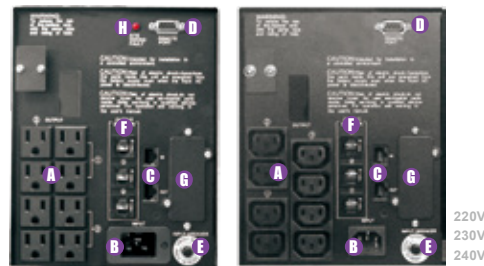
220V / 230V / 240V

1	ON: DC Start enabled		
2	ON: Green mode function enabled		
	220V	230V	240V
3	ON	OFF	OFF
4	OFF	ON	OFF

### PS1000B



### PS1500B



- A** Battery Backup Outlets
- B** Input
- C** Data Line Protection
- D** Communication port
- E** Input Breaker
- F** Output Breakers
- G** SNMP Card Slot
- H** Site Wiring Fault

### PS2200B / PS3000B & Battery Pack



- A** Battery Backup Outlets
- B** Input
- C** Data Line Protection
- D** Communication port
- E** Input Breaker
- F** Output Breakers
- G** SNMP Card Slot
- H** Site Wiring Fault

# Power Series

## PS800B / PS1000B / PS1500B / PS2200B / PS3000B

### Specifications

Model Name	PS800B	PS1000B	PS1500B	PS2200B	PS3000B	
<b>Topology</b>	Line-interactive, Low Frequency					
<b>On-battery Output Waveform</b>	Pure Sine Wave					
<b>Maximum Capacity</b>	800VA / 560W	1000VA / 700W	1500VA / 1050W	2200VA / 1760W	3000VA / 2400W	
<b>INPUT</b>						
<b>Nominal Input Voltage</b>	100 / 110 / 115 / 120Vac or 220 / 230 / 240Vac*	100 / 110 / 120Vac or 220 / 230 / 240Vac*				
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing					
<b>Input Voltage Range</b>	Rated Voltage $\pm$ 25%					
<b>OUTPUT</b>						
<b>Nominal Output Voltage</b>	100 / 110 / 115 / 120Vac or 220 / 230 / 240Vac	100 / 110 / 120Vac or 220 / 230 / 240Vac*				
<b>Output Voltage Regulation</b>	Rated Voltage $\pm$ 5% (on battery)					
<b>Transfer Time (typical)</b>	4 ms					
<b>Start on Battery</b>	Yes					
<b>Auto Restart</b>	Yes					
<b>Automatic Voltage Regulation (AVR)</b>	Yes					
<b>Number of Outlets</b>	6 Battery backup (NEMA 15A) 6 Battery backup (IEC 10A)	8 Battery backup (NEMA 15A) 8 Battery backup (IEC 10A)				
<b>PROTECTION</b>						
<b>Data Line Surge Protection</b>	RJ11 / RJ45					
<b>Surge Energy Rating</b>	1050 Joules					
<b>Overload Protection</b>	UPS shuts down at 110% load after 20 secs or 120% load after 5 secs					
<b>Over Current Protection</b>	Circuit Breaker					
<b>Discharge Protection</b>	Keylock					
<b>BATTERY</b>						
<b>Configuration</b>	24V (12V / 5AH $\times$ 2)	24V (12V / 34W $\times$ 2)	36V (12V / 34W $\times$ 3)	48V (12V / 7.2AH $\times$ 4 <sup>^</sup> ) / 2 sets	48V (12V / 34W $\times$ 4 <sup>^</sup> ) / 2 sets	
<b>Backup Time (Full / Half load)</b>	3 / 7 min	5 / 15 min	5 / 15 min	7 / 26 min	8 / 16 min	
<b>Recharge Time to 90% (Typical)</b>	<4 Hours					
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>						
<b>Front Panel</b>	AC mode / Battery mode	AC mode / Battery mode / Battery Fault / Battery Capacity / Buck Mode / Boost Mode / Load Percentage / Overload				
<b>Audible Alarms</b>	Battery mode / UPS fault / Overload					
<b>COMMUNICATION INTERFACE</b>						
<b>Communication Port**</b>	RS232	RS232 (USB Port is optional) <sup>#</sup>				
<b>ENVIRONMENTAL</b>						
<b>Operation Temperature</b>	0~40°C / 32~104°F					
<b>Storage Temperature</b>	-20~60°C / -4~140°F					
<b>Relative Humidity</b>	0~95% Non condensing					
<b>Audible Noise (AC Mode)</b>	< 40 dBA					
<b>PHYSICAL</b>						
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	12.28 $\times$ 5 $\times$ 7.68 / 15.35 $\times$ 9.06 $\times$ 11.81	17.5 $\times$ 5.5 $\times$ 7.9 / 21.7 $\times$ 10.6 $\times$ 13	17.7 $\times$ 6.7 $\times$ 8.5 / 22 $\times$ 11.8 $\times$ 14.2		
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	312 $\times$ 127 $\times$ 195 / 390 $\times$ 230 $\times$ 300	445 $\times$ 140 $\times$ 200 / 550 $\times$ 270 $\times$ 330	450 $\times$ 170 $\times$ 215 / 560 $\times$ 300 $\times$ 360		
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	23.59 / 25.79	33 / 35.3	55 / 59.5	41.9 / 46.3	59.1 / 64.6
	<b>(kg)</b>	10.7 / 11.7	15 / 16	25 / 27	19 / 21	26.8 / 29.3
<b>Battery Pack Dimensions</b>	<b>Physical / Packing (in)</b>	Battery pack included		17.52 $\times$ 6.69 $\times$ 8.46 / 21.65 $\times$ 11.81 $\times$ 14.2		
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	Battery pack included		450 $\times$ 170 $\times$ 215 / 560 $\times$ 300 $\times$ 360		
<b>Battery Pack</b>	<b>(lbs)</b>	Battery pack included		56.6 / 60.1	59.9 / 63.2	
	<b>(kg)</b>	Battery pack included		25.6 / 27.2	27.1 / 28.6	
<b>CONFORMANCE</b>						
<b>Approvals</b>	UL / cUL, CE, GOST-R			CE, GOST-R		

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

\*\* You can purchase RS232 to USB cable.

<sup>^</sup> The external battery pack is included with PS2200B and PS3000B. Battery pack needs to be connected to UPS before connecting any load and turning on the UPS.

<sup>#</sup> The model with optional USB port provides both RS232 and USB connectivity, but only one connectivity can be used at a time.



For Mac OS support please purchase the RS232 to USB cable.

# Power Series



PS1000B-RM / PS1500B-RM / PS2200B-RM / PS3000B-RM

\* PS1000B-RM /  
PS1500B-RM

## Features

- Pure sine wave
- LCD display panel
- Software controlled outlets to switch power on / off
- Smart power management software
- RS232 or USB (optional) connectivity
- 4 hours battery recharge time
- 1050 Joules surge energy rating
- 8 battery backup outlets
- Cold start from battery
- Higher power factor

## Rear Panel

PS1000B-RM / PS1500B-RM



100V / 110V / 120V

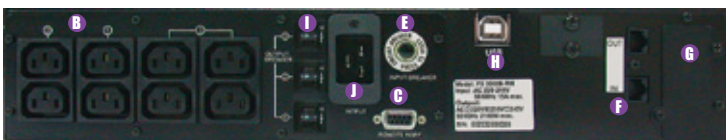


220V / 230V / 240V

PS2200B-RM / PS3000B-RM



100V / 110V / 120V



220V / 230V / 240V

- A** Output (NEMA 15A)
- B** Output (IEC 10A)
- C** Communication Port
- D** Input
- E** Input Circuit Breaker
- F** Data Line Protection
- G** SNMP Card Slot
- H** USB (Optional)
- I** Output Breaker
- J** IEC 16A



For Mac OS support please purchase  
the RS232 to USB cable.

# Power Series

## PS1000B-RM / PS1500B-RM / PS2200B-RM / PS3000B-RM

### Specifications

Model Name	PS1000B-RM	PS1500B-RM	PS2200B-RM	PS3000B-RM
<b>Topology</b>	Line-interactive, Low Frequency			
<b>On-battery Output Waveform</b>	Pure Sine Wave			
<b>Maximum Capacity</b>	1000VA / 700W	1500VA / 900W	2200VA / 1540W	3000VA / 2100W
<b>INPUT</b>				
<b>Nominal Input Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing			
<b>Input Voltage Range</b>	Rated Voltage $\pm$ 25%			
<b>OUTPUT</b>				
<b>Nominal Output Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac*			
<b>Output Voltage Regulation</b>	Rated Voltage $\pm$ 5% (on battery)			
<b>Transfer Time (typical)</b>	4 ms			
<b>Start on Battery</b>	Yes			
<b>Auto Restart</b>	Yes			
<b>Automatic Voltage Regulation (AVR)</b>	Yes			
<b>Number of Outlets</b>	8 Battery backup (NEMA 15A) 8 Battery backup (IEC 10A)			
<b>PROTECTION</b>				
<b>Data Line Surge Protection</b>	RJ11 / RJ45			
<b>Surge Energy Rating</b>	1050 Joules			
<b>Overload Protection</b>	UPS shuts down at 110% load after 20 secs or 120% load after 5 secs			
<b>Over Current Protection</b>	Circuit Breaker			
<b>Discharge Protection</b>	Keylock			
<b>BATTERY</b>				
<b>User Replaceable Battery</b>	36V (12V / 7.2AH $\times$ 3)	36V (12V / 34W $\times$ 3)	48V (12V / 21W $\times$ 4) / 2 sets	
<b>Backup Time (Full / Half load)</b>	6 / 20 min	5 / 18 min	8 / 20 min	6 / 15 min
<b>Recharge Time to 90% (Typical)</b>	<4 Hours			
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>				
<b>Front Panel</b>	AC mode / Battery mode / Battery Fault / Battery Capacity / Buck Mode / Boost Mode / Load Percentage / Overload			
<b>Audible Alarms</b>	Battery mode / UPS fault / Overload			
<b>COMMUNICATION INTERFACE</b>				
<b>Communication Port**</b>	RS232 (USB Port is optional)#			
<b>ENVIRONMENTAL</b>				
<b>Operation Temperature</b>	0~40°C / 32~104°F			
<b>Storage Temperature</b>	-20~60°C / -4~140°F			
<b>Relative Humidity</b>	0~95% Non condensing			
<b>Audible Noise (AC Mode)</b>	< 40 dBA			
<b>PHYSICAL</b>				
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	21.7 $\times$ 16.9 $\times$ 3.3 / 28.6 $\times$ 22.5 $\times$ 8.1		24.2 $\times$ 16.9 $\times$ 3.3 / 31.3 $\times$ 22.5 $\times$ 10.5
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	550 $\times$ 428 $\times$ 84 / 726 $\times$ 571 $\times$ 206		615 $\times$ 428 $\times$ 84 / 796 $\times$ 571 $\times$ 266
<b>Weight (Net / Gross)</b>	<b>lbs</b>	73.8 / 78.6		95.2 / 102.1
	<b>kg</b>	33.5 / 35.7		43.2 / 46.3
<b>CONFORMANCE</b>				
<b>Approvals</b>	CE, GOST-R			

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

\*\* You can purchase RS232 to USB cable.

# The model with optional USB port provides both RS232 and USB connectivity, but only one connectivity can be used at a time.

# Power Series

PS650D / PS1000D / PS1500D / PS2000D /  
PS1000D-RM / PS1500D-RM /  
PS1000D-RT / PS1500D-RT / PS2000D-RT /  
PS3000D-RT / PS5000D-RT /  
PS7500D-RT / PS10000D-RT / PS3000DL / PS5000DL / PS7500DL

\* PS1000D / PS1500D /  
PS2000D



\* PS650D



## Features

- Convertible LCD indicator for both tower & rack-mounted applications
- Pure sine wave for both linear & non-linear loads
- Long backup ability - charge current from 2A to 10A
- Built-in powerful charger with input power factor correction
- Emergency power off function (EPO)
- Multi-interface slot for RS232, SNMP, RS485, Modbus, USB and dry contact
- Multi-interface card provides additional RS232, USB and dry contact communication
- Smart fan speed control
- All communication interfaces can be enabled at the same slot
- Detachable LCD Control Panel
- Overload, overheat and over charge protections
- Surges, spikes and short circuit protections
- Cold start (DC power on)
- User swappable batteries

## Functions



### Ideal Tower / Rack Convertible Design

Convertible LCD indicator is designed for both tower & rack-mounted applications



### User swappable batteries

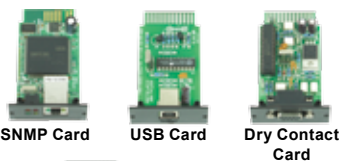
Easy to replace the batteries by users, simply open the front panel and assemble the batteries.

## Options



### Detachable LCD Panel

Two-way dialogue LCD control panel can be detached from the unit and extended to 200m



SNMP Card

USB Card

Dry Contact Card



Dry Contact Card  
(for AS400 &  
General use)

USB & RS232 Card

### Multiple Communication Interface

With the intelligent design, the multi-interface slot and multi-interface card supply various communications including RS232, SNMP, RS485, AS-400, Modbus, USB, dry contact and customized interfaces. All interfaces can be enabled at the same slot.



\* PS1000D-RM / PS1500D-RM (1U)



\* PS1000D-RT / PS1500D-RT /  
PS2000D-RT (2U)



\* PS3000D-RT / PS5000D-RT /  
PS7500D-RT / PS10000D-RT (3U)



# Power Series

PS650D / PS1000D / PS1500D / PS2000D / PS1000D-RM / PS1500D-RM / PS1000D-RT / PS1500D-RT / PS2000D-RT / PS3000D-RT / PS5000D-RT / PS7500D-RT / PS10000D-RT / PS3000DL / PS5000DL / PS7500DL

## Rear Panel

### PS650D



230V

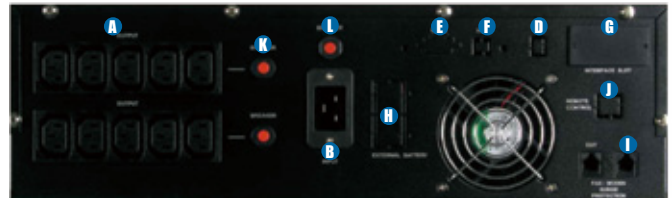
- A USB
- B Remote Control
- C Fax / Modem Surge Protection
- D Output
- E Breaker
- F Input

### PS1000D-RM / PS1500D-RM (1U)



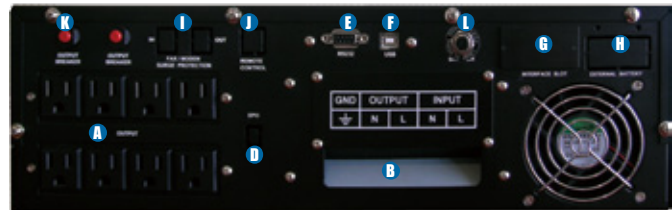
230V

### PS3000DL / PS3000D-RT Convertible Unit (3U)



230V

### PS5000D-RT Convertible Unit (3U)



120V

### PS1000D / PS1500D



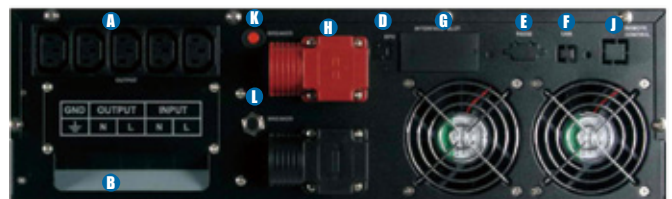
120V



230V

- A Remote Control
- B External Battery
- C Multi Card Slot
- D Breaker
- E Fax / Modem Surge Protection
- F Output
- G Input

### PS5000DL / PS7500D-RT / PS7500DL / PS10000D-RT Convertible Unit(3U)



230V

- A Output
- B Input
- C Breaker
- D EPO
- E RS232
- F USB
- G Multi Card Slot
- H External Battery
- I FAX / Modem Surge Protection
- J Remote Control
- K Output Breaker
- L Input Breaker

# Power Series

## PS650D / PS1000D / PS1500D / PS2000D / PS1000D-RM / PS1500D-RM / PS1000D-RT / PS1500D-RT / PS2000D-RT

### Specifications

Model Name	PS650D	PS1000D	PS1500D	PS2000D	PS1000D-RM	PS1500D-RM	PS1000D-RT	PS1500D-RT	PS2000D-RT	
<b>Topology</b>	Line-interactive, Low Frequency									
<b>On-battery Output Waveform</b>	Pure Sine Wave									
<b>Maximum Capacity</b>	650VA / 406W	1000VA / 625W	1500VA / 938W	2000VA / 1250W	1000VA / 625W	1500VA / 938W	1000VA / 625W	1500VA / 938W	2000VA / 1250W	
<b>Cabinet Type</b>	Tower			1U Rack			2U Tower & Rack Convertible			
<b>INPUT</b>										
<b>Nominal Input Voltage</b>	110 / 120Vac or 220 / 230 / 240Vac*									
<b>Nominal Input Frequency</b>	50Hz~60Hz Auto Sensing									
<b>Input Voltage Range</b>	85Vac ~ 150Vac(110 / 120Vac) or 170Vac ~ 300Vac(220 / 230 / 240Vac)									
<b>OUTPUT</b>										
<b>Nominal Output Voltage</b>	110 / 120Vac or 220 / 230 / 240Vac re-settable via LCD panel									
<b>Output Voltage Regulation</b>	Rated Voltage ±3% (on battery)									
<b>Transfer Time (Typical)</b>	4 ms									
<b>Start on Battery</b>	Yes									
<b>Auto Restart</b>	Yes									
<b>Automatic Voltage Regulation(AVR)</b>	Yes									
<b>Number of Outlets</b>	3 Battery backup (NEMA 15A) 4 Battery backup (IEC 10A)	4 Battery backup (NEMA 15A) 3 Battery backup (IEC 10A)	6 Battery backup (NEMA 15A) 6 Battery backup (IEC 10A)	4 Battery backup (NEMA 15A) 5 Battery backup (IEC 10A)	4 Battery backup (NEMA 15A) 6 Battery backup (IEC 10A)					
<b>PROTECTION</b>										
<b>Data Line Surge Protection</b>	RJ11 (optional)	RJ11			RJ11					
<b>Overload Protection</b>	UPS shuts down at 135% load after 30 secs or 150% load after 200ms									
<b>Over Current Protection</b>	Circuit breaker									
<b>Discharge Protection</b>	Keylock									
<b>BATTERY</b>										
<b>Configuration</b>	12V (12V / 9AH×1)	24V (12V / 7.2AH×2)	36V (12V / 7.2AH×3)	36V (12V / 9AH×3)	24V (12V / 7.2AH×2)	24V (12V / 9AH×2)	24V (12V / 7.2AH×2)	36V (12V / 7.2AH×3)	36V (12V / 9AH×3)	
<b>Backup Time (Full / Half Load)</b>	3 / 11min	3 / 11min	4 / 11min	3 / 10 min	3 / 11min	5 / 15 min	3 / 11min	4 / 11min	3 / 10 min	
<b>Recharge Time to 90% (Typical)</b>	< 4 Hours									
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>										
<b>Front Panel</b>	LED: Normal (Green)	LCD: UPS status, I / P&O / P Voltage Frequency, Load Level, Battery Voltage & Level, Temperature, Model								
<b>Audible Alarms</b>	LED: Normal (Green), Warning (Amber), Fault (Red)									
<b>Communication Port</b>	USB (Remote control optional)	RS232, Remote Control (Optional interface of USB, Dry Contact, SNMP, RS485, AS400 or Modbus)			RS232 (Optional interface of USB, Dry Contact, SNMP, RS485, AS400, Modbus or Remote Control)					
<b>ENVIRONMENTAL</b>										
<b>Operation Temperature</b>	0~40°C / 32~104°F									
<b>Storage Temperature</b>	-20~60°C / -4~140°F									
<b>Relative Humidity</b>	0~95% Non condensing									
<b>Audible Noise</b>	< 45 dBA									
<b>PHYSICAL</b>										
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	4.6×12.8×5.2 / 8.7×16×6.5	5.8×8.4×15.2 / 10×12.8×20.4	5.8×8.4×17.8 / 10×12.8×20.4	17.6×1.76×20.6 / 24.4×9.2×22.2			17.6×3.52×18.6 / 24.4×9.2×22.2		
	<b>W×H×D(mm)</b>	115×322×130 / 221×406×166	145×210×380 / 250×320×510	145×210×445 / 250×320×510	440×44×515 / 610×230×555			440×88×465 / 610×230×555		
<b>Weight (Net / Gross)</b>	<b>lbs</b>	13.7 / 18.5	36.4 / 41.3	38.6 / 41.7	42.8 / 47.2	39.7 / 42.8	44.2 / 47.2	35.8 / 38.9	38.6 / 41.7	54.1 / 59
	<b>kg</b>	6.2 / 8.4	16.5 / 18.7	17.5 / 18.9	19.4 / 21.4	18 / 19.4	20 / 21.4	16.2 / 17.6	17.5 / 18.9	24.5 / 26.7

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

# For special application >20A max. current is settable, please specify when ordering.



# Power Series

## PS3000D-RT / PS5000D-RT / PS7500D-RT / PS10000D-RT / PS3000DL / PS5000DL / PS7500DL

### Specifications

Model Name	PS3000D-RT	PS5000D-RT	PS3000DL	PS5000DL	PS7500D-RT	PS10000D-RT	PS7500DL
<b>Topology</b>	Line-interactive, Low Frequency						
<b>On-battery Output Waveform</b>	Pure Sine Wave						
<b>Maximum Capacity</b>	3000VA / 1875W	5000VA / 3125W	3000VA / 1875W	5000VA / 3125W	7500VA / 4688W	10KVA / 6250W	7500VA / 4688W
<b>UPS Type</b>	Tower & Rack Convertible		Long backup time		Tower & Rack Convertible		Long backup time
<b>Cabinet Type</b>	3U Rack & Tower Convertible						
<b>INPUT</b>							
<b>Nominal Input Voltage</b>	110 / 120Vac or 220 / 230 / 240Vac*				220 / 230 / 240Vac*		
<b>Nominal Input Frequency</b>	45~70Hz Auto Sensing				45~70Hz Auto Sensing		
<b>Input Voltage Range</b>	85Vac ~ 150Vac or 170Vac ~ 300Vac				170Vac ~ 300Vac		
<b>OUTPUT</b>							
<b>Nominal Output Voltage</b>	110 / 120Vac or 220 / 230 / 240Vac re-settable via LCD panel				220 / 230 / 240Vac re-settable via LCD panel		
<b>Output Voltage Regulation</b>	Rated Voltage $\pm 3\%$ (on battery)						
<b>Transfer Time (Typical)</b>	4 ms						
<b>Start on Battery</b>	Yes						
<b>Auto Restart</b>	Yes						
<b>Automatic Voltage Regulation(AVR)</b>	Yes						
<b>Number of Outlets</b>	8 Battery backup (NEMA 15A) 10 Battery backup (IEC 10A)	8 Battery backup (NEMA 15A) + 1 terminal block 10 Battery backup (IEC 10A)+ 1 terminal block	8 Battery backup (NEMA 15A) 10 Battery backup (IEC 10A)		4 Battery backup (NEMA 15A) + 1 terminal block 5 Battery backup (IEC 10A)+ 1 terminal block		
<b>PROTECTION</b>							
<b>Data Line Surge Protection</b>	RJ11						
<b>Overload Protection</b>	UPS shuts down at 135% load after 30 secs or 150% load after 200m secs						
<b>Over Current Protection</b>	Circuit breaker						
<b>Discharge Protection</b>	Keylock						
<b>BATTERY</b>							
<b>Configuration</b>	36V (12V / 7.2AHx3) / 2sets	48V (12V / 9AHx4) / 2sets	36V / no batt	48V / no batt	48V (12V / 7.2AHx4) / 4 sets	48V (12V / 9AHx4) / 4sets	48V / no batt
<b>Backup Time (Full / Half load)</b>	4 / 11min	3 / 11min	Depends on overall battery capacity		4 / 12 min	3 / 12 min	Depends on overall battery capacity
<b>Recharge Time to 90% (Typical)</b>	< 4 Hours				< 4 Hours		
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>							
<b>Front Panel</b>	LCD: UPS status, I/P & O/P Voltage Frequency, Load Level, Battery Voltage & Level, Temperature, Model LED: Normal (Green), Warning (Amber), Fault (Red)						
<b>Audible Alarms</b>	Battery mode / UPS fault / Overload						
<b>COMMUNICATION INTERFACE</b>							
<b>Communication Port</b>	RS232 (Optional interface of USB, Dry Contact, SNMP, RS485, AS400, Modbus or Remote Control)						
<b>ENVIRONMENTAL</b>							
<b>Operation Temperature</b>	0~40°C / 32~104°F						
<b>Storage Temperature</b>	-20~60°C / -4~140°F						
<b>Relative Humidity</b>	0~95% Non condensing						
<b>Audible Noise</b>	< 45 dBA						
<b>PHYSICAL</b>							
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	17.6x5.28x18.6 / 28.8x16x21.6	17.6x5.28x24.8 / 28.8x16x21.6	17.6x5.28x18.6 / 28.8x16x21.6			
	<b>WxHxD (mm)</b>	440x132x465 / 720x400x540	440x132x620 / 720x400x540	440x132x465 / 720x400x540			
<b>Weight (Net / Gross)</b>	<b>lbs</b>	81.5 / 92.6	110 / 134.3	55.3 / 76.9	69.8 / 91.5	172.6 / 196.5	80 / 100
	<b>(kg)</b>	36.9 / 41.9	49.8 / 60.8	25 / 34.8	31.6 / 41.4	78.1 / 88.9	36.2 / 45.4

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.

# For special application >20A max. current is settable, please specify when ordering.

# PS3000DL / PS5000DL / PS10000DL are long backup models, the batteries are not available inside. An external battery pack must be used.

# 3U External battery packs for PS-DL models: BP PS16D (16pcs 12V / 7Ah or 16pcs 12V / 9Ah, Dimension: 440(W)x132(H)x465(D)mm).



# Durable Series

An Online UPS is not a further improvement of the standby technology, but a completely different approach to providing the highest level of power supply. A double-conversion refers to converting the incoming AC power into DC power, and inverting it back to AC power. This ensures the newly reproduced power to be of a quality standard set by UPS, to be completely cleared of all imperfections of the power coming from the AC mains. Regardless of what is happening on the AC mains side, the UPS output voltage, frequency and signal purity are kept up to the highest standards. The current flow is absolutely uninterruptible, the transfer time is zero. The UPS can work in pair with diesel generator, and can accommodate additional battery cabinets for a longer backup time.



\* DS1000B

Beside those, the Durable Series UPS offer a set of essential features that make these UPS a flexible power supply control and power saving tool.

By now the Durable Series UPS perfectly serve their purpose in numerous data processing, medical, banking and other mission critical centres around the globe.

## DS1000B / DS1500B / DS2000B / DS3000B

### Features

- Zero transfer time (online)
- Smart fan speed control
- Saves more power and minimizes noise
- 4 hours recharge time
- Cold start (DC power on)
- EPO port ready: emergency power off switch
- SNMP card slot available
- Hot swappable / replaceable battery: continuous operation even when battery is being replaced
- Extended battery pack (optional)
- RS232 and USB port
- Full version of OPTI-SAFE software

### Front Panel



- 1 Function
- 2 Enter
- 3 On / Off

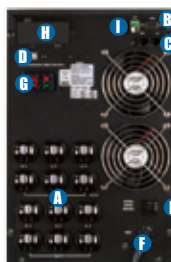
### Rear Panel

#### DS1000B / DS1500B



100V / 110V / 120V

#### DS2000B



100V / 110V / 120V

#### DS3000B



100V / 110V / 120V



220V / 230V / 240V



220V / 230V / 240V



220V / 230V / 240V

- A Battery Backup Outlets
- B RS232
- C Data Line Protection
- D USB
- E Circuit Breaker
- F Input
- G Extended Battery Connector
- H SNMP Card Slot
- I EPO

# Durable Series

## DS1000B / DS1500B / DS2000B / DS3000B

### Specifications

Model Name	DS1000B	DS1500B	DS2000B	DS3000B
<b>Topology</b>	True On-Line, Double Conversion, High Frequency			
<b>On-battery Output Waveform</b>	Pure Sine Wave			
<b>Maximum Capacity</b>	1000VA / 700W	1500VA / 1050W	2000VA / 1400W	3000VA / 2100W
<b>INPUT</b>				
<b>Nominal Input Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac			
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing			
<b>Input Voltage Range</b>	80-144Vac (100 / 110 / 120Vac) or 160-276Vac (220 / 230 / 240Vac)			
<b>OUTPUT</b>				
<b>Nominal Output Voltage</b>	100 / 110 / 120 / 127Vac or 220 / 230 / 240Vac (selectable)			
<b>Output Voltage Regulation</b>	Rated Voltage $\pm 2\%$ (on battery)			
<b>Transfer Time (Typical)</b>	0 ms			
<b>Start on Battery</b>	Yes			
<b>Auto Restart</b>	Yes			
<b>Number of Outlets</b>	6 Battery backup (NEMA 15A) 4 Battery backup (IEC 10A)		12 Battery backup (NEMA 15A) 9 Battery backup (IEC 10A $\times 8$ / 16A $\times 1$ )	12 Battery backup (NEMA 15A)
<b>PROTECTION</b>				
<b>Data Line Surge Protection</b>	RJ11 / RJ45			
<b>Surge Energy Rating</b>	125 Joules (100 / 110 / 120Vac) or 280 Joules (220 / 230 / 240Vac)			
<b>Overload Protection</b>	UPS shuts down at 110% load after 10 secs or 130% load after 1.5 secs			
<b>Over Current Protection</b>	Circuit Breaker			
<b>Discharge Protection</b>	Keylock			
<b>BATTERY</b>				
<b>Configuration</b>	36V (12V 7.2AH $\times 3$ )	36V (12V 34W $\times 3$ )	72V (12V 7.2AH $\times 6$ )	72V (12V 34W $\times 6$ )
<b>Backup Time (Full / Half load)</b>	6 / 18 min	5 / 15 min	6 / 18 min	5 / 15 min
<b>Recharge Time to 90% (Typical)</b>	< 4 Hours			
<b>Extended Battery Pack (Optional)*</b>	BP1000 12V 7.2AH $\times 6$	BP1500 12V 34W $\times 6$	BP2000 12V 7.2AH $\times 12$	BP3000 12V 34W $\times 12$
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>				
<b>Front Panel</b>	AC mode / On line / On battery / Bypass / Fault / Overload and 15 UPS Status			
<b>Audible Alarms</b>	Battery mode / UPS faults / Overload			
<b>COMMUNICATION INTERFACE</b>				
<b>Communication Port</b>	RS232 and USB#			
<b>SNMP Manageable</b>	Yes			
<b>ENVIRONMENTAL</b>				
<b>Operation Temperature</b>	0~40°C / 32~104°F			
<b>Storage Temperature</b>	-20~60°C / -4~140°F			
<b>Relative Humidity</b>	0~95% Non condensing			
<b>Audible Noise</b>	<40dBA			
<b>PHYSICAL</b>				
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	16.5 $\times$ 6 $\times$ 9.4 / 21.5 $\times$ 11 $\times$ 14		16.5 $\times$ 8.9 $\times$ 14.1 / 20.7 $\times$ 13.8 $\times$ 19.1
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	420 $\times$ 152 $\times$ 238 / 545 $\times$ 280 $\times$ 355		420 $\times$ 225 $\times$ 358 / 526 $\times$ 350 $\times$ 485
<b>Weight (Net / Gross)</b>	<b>lbs</b>	36.4 / 40.6	37.7 / 41.9	68.5 / 74.1
	<b>kg</b>	16.5 / 18.4	17.1 / 19	31.1 / 33.6
<b>Battery Pack Dimensions</b>	<b>Physical / Packing (in)</b>	16.5 $\times$ 6 $\times$ 9.4 / 21.5 $\times$ 11 $\times$ 14		16.5 $\times$ 8.9 $\times$ 14.1 / 20.7 $\times$ 13.8 $\times$ 19.1
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	420 $\times$ 152 $\times$ 238 / 545 $\times$ 280 $\times$ 355		420 $\times$ 225 $\times$ 358 / 526 $\times$ 350 $\times$ 485
<b>Battery Pack (Net / Gross)</b>	<b>lbs</b>	46.7 / 50		88.4 / 98.4
	<b>kg</b>	21.1 / 22.6		40 / 44.5
<b>CONFORMANCE</b>				
<b>Approvals</b>	UL / cUL, CE, GOST-R			

Specifications are subject to change without notice.

\* The external battery pack is optional. Battery pack needs to be connected to UPS before connecting any load and turning on the UPS.

# The model with optional USB port provides both RS232 and USB connectivity, but only one connectivity can be used at a time.



PC & WORKSTATION

SOHO & WORKSTATION

NETWORK & SERVER

DATA CENTER & FACILITY

SOFTWARE

HOME & OFFICE  
APPLIANCES

FACTORY & AUTOMATION  
EQUIPMENT

# Durable Series

\* DS1000B-RM



## DS1000B-RM / DS1500B-RM / DS2000B-RM / DS3000B-RM

### Features

- Zero transfer time (online)
- Smart fan speed control
- Saves more power and minimizes noise
- 4 hours recharge time
- Cold start (DC power on)
- EPO port ready: emergency power off switch
- SNMP card slot available
- Hot swappable / replaceable battery: continuous operation even when battery is being replaced
- Extended battery pack (optional)
- RS232 and USB port
- Full version of OPTI-SAFE software

### Front Panel

#### DSB-RM



- 1 Function
- 2 Enter
- 3 On / Off

### Rear Panel

#### DS1000B-RM / DS1500B-RM



100V / 110V / 120V



220V / 230V / 240V

#### DS2000B-RM



100V / 110V / 120V



220V / 230V / 240V

#### DS3000B-RM



100V / 110V / 120V



220V / 230V / 240V

- Ⓐ Battery Backup Outlets
- Ⓑ Input
- Ⓒ Data Line Protection
- Ⓓ USB
- Ⓔ Extended Battery Connector
- Ⓕ RS232
- Ⓖ EPO
- Ⓗ SNMP Card Slot
- Ⓘ Output Circuit Breaker
- ⓷ Input Circuit Breaker

# Durable Series

## DS1000B-RM / DS1500B-RM / DS2000B-RM / DS3000B-RM

### Specifications

Model Name	DS1000B-RM	DS1500B-RM	DS2000B-RM	DS3000B-RM
<b>Topology</b>	True On-Line, Double Conversion, High Frequency			
<b>On-battery Output Waveform</b>	Pure Sine Wave			
<b>Maximum Capacity</b>	1000VA / 700W	1500VA / 1050W	2000VA / 1400W	3000VA / 2100W
<b>INPUT</b>				
<b>Nominal Input Voltage</b>	100 / 110 / 120Vac or 220 / 230 / 240Vac			
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing			
<b>Input Voltage Range</b>	80-144Vac(100 / 110 / 120Vac) or 160-276Vac(220 / 230 / 240Vac)			
<b>OUTPUT</b>				
<b>Nominal Output Voltage</b>	100 / 110 / 120 / 127Vac or 220 / 230 / 240Vac (selectable)			
<b>Output Voltage Regulation</b>	Rated Voltage $\pm 2\%$ (on battery)			
<b>Transfer Time (Typical)</b>	0 ms			
<b>Start on Battery</b>	Yes			
<b>Auto Restart</b>	Yes			
<b>Number of Outlets</b>	6 Battery backup (NEMA 15A) 4 Battery backup (IEC 10A)		4 Battery backup (NEMA 15A) 5 Battery backup (IEC 10A*4 / 16A*1)	4 Battery backup (NEMA 15A)
<b>PROTECTION</b>				
<b>Data Line Surge Protection</b>	RJ11 / RJ45			
<b>Surge Energy Rating</b>	125J (100 / 110 / 120Vac), 280J (220 / 230 / 240Vac)			
<b>Overload Protection</b>	UPS shuts down at 110% load after 10 secs or 130% load after 1.5 secs			
<b>Over Current Protection</b>	Circuit Breaker			
<b>Discharge Protection</b>	Keylock			
<b>BATTERY</b>				
<b>Configuration</b>	36V (12V 7.2AH*3)	36V (12V 34W*3)	72V (12V 7.2AH*6)	72V (12V 34W*6)
<b>Backup Time (Full / Half load)</b>	6 / 18 min	5 / 15 min	6 / 18 min	5 / 15 min
<b>Recharge Time to 90% (Typical)</b>	<4 Hours			
<b>Extended Battery Pack (Optional)*</b>	BP1000-RM 12V 7.2AH*6	BP1500-RM 12V 34W*6	BP2000-RM 12V 7.2AH*12	BP3000-RM 12V 34W*12
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>				
<b>Front Panel</b>	AC mode / On line / On battery / Bypass / Fault / Overload and 15 UPS Parameters			
<b>Audible Alarms</b>	Battery mode / UPS faults / Overload			
<b>COMMUNICATION INTERFACE</b>				
<b>Communication Port</b>	RS232 and USB#			
<b>SNMP Manageable</b>	Yes			
<b>ENVIRONMENTAL</b>				
<b>Operation Temperature</b>	0~40°C / 32~104°F			
<b>Storage Temperature</b>	-20~60°C / -4~140°F			
<b>Relative Humidity</b>	0~95% Non condensing			
<b>Audible Noise</b>	<40dBA			
<b>PHYSICAL</b>				
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	16.9×16.7×3.3 / 21.7×21.5×8.1		25×16.9×3.3 / 29.5×21.7×8.7
	<b>L×W×H (mm)</b>	428×425×84 / 552×546×206		635×428×84 / 750×550×220
<b>Weight (Net / Gross)</b>	<b>lbs</b>	40.1 / 47.4	40.6 / 47.8	69.7 / 74.5
	<b>kg</b>	18.2 / 21.5	18.4 / 21.7	31.6 / 33.8
<b>Battery Pack Dimensions</b>	<b>Physical / Packing (in)</b>	16.7×16.9×3.3 / 21.5×21.7×8.1		25×16.9×3.3 / 29.5×21.7×8.7
	<b>L×W×H (mm)</b>	425×428×84 / 546×552×206		635×428×84 / 750×550×220
<b>Battery Pack (Net / Gross)</b>	<b>(lbs)</b>	48.7 / 53.1		94 / 101.7
	<b>(kg)</b>	22 / 24		42.5 / 46
<b>CONFORMANCE</b>				
<b>Approvals</b>	UL / cUL, CE, GOST-R			

Specifications are subject to change without notices

\* The external battery pack is optional. Battery pack needs to be connected to UPS before connecting any load and turning on the UPS.

# The model with optional USB port provides both RS232 and USB connectivity, but only one connectivity can be used at a time.



# Durable Series

DS6000B / DS6KBT / DS8000B / DS8KBT / DS10000B /  
DS10KBT / DS12000B / DS12KBT / DS15000B / DS15KBT /  
DS20000B / DS20KBT

Online Double Conversion 1-phase input 1-phase output UPS



\* DS8000B

## Features

- Online double conversion design
- Pure sine wave output with less than 3% THD
- Fully digitized microprocessor control
- Power factor correction
- Selectable UPS output voltage
- High efficiency mode
- Cold start function (DC power on)
- Emergency power off function (EPO)
- Lightning and surge protection
- Short circuit and overload protection
- Fax / Modem / LAN data line surge protection
- Advanced battery management (ABM)
- Automatic battery charging in UPS OFF mode
- Automatic diagnostics and battery check-up
- Extended battery pack available
- Multilanguage LCD display
- RS232 and USB Communication ports, UPS monitoring software

## Front Panel

DS6000B / DS6KBT / DS8000B / DS8KBT / DS10000B / DS10KBT / DS12000B /  
DS12KBT / DS15000B / DS15KBT / DS20000B / DS20KBT



## Rear Panel

DS12000B /  
DS12KBT

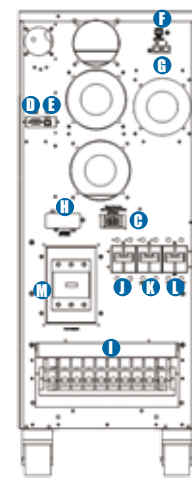
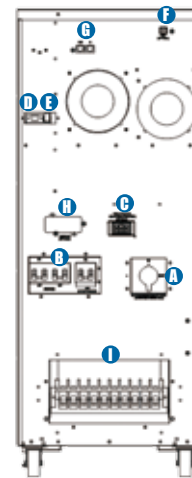
DS15000B / DS15KBT /  
DS20000B / DS20KBT

DS6000B

DS6KBT

DS8000B /  
DS10000B

DS8KBT /  
DS10KBT



- A** Maintenance Switch
- B** Input Breaker / Output Breaker (6K)  
Input Breaker / Battery Breaker (8K-20K)
- C** Extended Battery Connector
- D** EPO

- E** RS232
- F** USB
- G** Data Line Protection
- H** SNMP Card Slot
- I** Terminal Block

- J** Battery Breaker
- K** Maintenance Breaker
- L** Inverter Breaker
- M** Input Breaker

# Durable Series

## DS6000B / DS6KBT / DS8000B / DS8KBT / DS10000B / DS10KBT / DS12000B / DS12KBT / DS15000B / DS15KBT / DS20000B / DS20KBT Online Double Conversion 1-phase input 1-phase output UPS

### Specifications

Model Name	DS6000B / DS6KBT	DS8000B / DS8KBT	DS10000B / DS10KBT	DS12000B / DS12KBT	DS15000B / DS15KBT	DS20000B / DS20KBT
<b>Topology</b>	True On-Line, Double Conversion, High Frequency					
<b>On-battery Output Waveform</b>	Pure Sine Wave					
<b>Maximum Capacity</b>	6000VA / 4200W	8000VA / 5600W	10000VA / 7000W	12000VA / 8400W	15000VA / 10500W	20000VA / 14000W
<b>INPUT</b>						
<b>Nominal Input Voltage</b>	220V / 230V / 240Vac					
<b>Input Voltage Regulation</b>	180-276Vac					
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing					
<b>OUTPUT</b>						
<b>Nominal Output Voltage</b>	220V / 230V / 240V (1Ø, 2wires without Isolation Transformer) or 110 / 220V, 115 / 230V, 120 / 240V (1Ø, 3wires with Isolation Transformer)					
<b>Output Voltage Regulation</b>	Rated Voltage ±2% (on battery)					
<b>Transfer Time (Typical)</b>	0 ms					
<b>Start on Battery</b>	Yes					
<b>Auto Restart</b>	Yes					
<b>PROTECTION</b>						
<b>Data Line Surge Protection</b>	RJ11 / RJ45					
<b>Overload Protection</b>	UPS shuts down at 110% load after 10 secs or 130% load after 1.5 secs					
<b>Over Current Protection</b>	Circuit Breaker					
<b>Discharge Protection</b>	Keylock					
<b>BATTERY</b>						
<b>Configuration</b>	240V (12V / 7.2AH×20) / 1set	240V (12V / 9AH×20) / 1 set	240V (12V 7.2AH×20) / 2 sets	240V (12V 7.2AH×20) / 2 sets	240V (12V 9AH×20) / 2 sets	240V (12V 9AH×20) / 2 sets
<b>Backup Time (Full / Half load)</b>	7 / 20 min	4 / 13 min	4 / 14 min	6 / 21min	4 / 15min	4 / 14 min
<b>Recharge Time to 90% (Typical)</b>	< 4 Hours					
<b>Extended Battery Pack (Optional)*</b>	BP6000	BP8000	BP10000	BP12000	BP15000	BP20000
	12V / 7.2AH or 9AH×20 / 2 sets					
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>						
<b>Front Panel</b>	On / On Line / On Battery / Bypass / Fault and 15 UPS status					
<b>Audible Alarms</b>	Battery Mode / Battery Test / Replace Battery / Low Battery / UPS fault / Overload					
<b>COMMUNICATION INTERFACE</b>						
<b>Communication Port</b>	RS232 & USB <sup>#</sup>					
<b>SNMP Manageable</b>	Yes					
<b>ENVIRONMENTAL</b>						
<b>Operation Temperature</b>	0°~40°C / 32°~104°F					
<b>Storage Temperature</b>	-15°~50°C / 5°~122°F					
<b>Relative Humidity</b>	0~95% Non condensing					
<b>Audible Noise</b>	< 55 dBA					
<b>PHYSICAL / DS-B</b>						
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	23.2×10.1×22.4 / 30.3×16.1×31.5	27.2×10.1×28.1 / 33.8×16.3×37.2	27.2×13.5×34.6 / 35.0×20.7×43.6	29.7×13.5×35.6 / 37.2×19.7×44.7	
	<b>L×W×H (mm)</b>	590×257×570 / 770×410×800	690×257×715 / 860×415×945	690×342×878 / 888×527×1108	755×342×905 / 945×500×1135	
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	191.6 / 233.5	237.9 / 281.9	242.3 / 286.3	418.9 / 460.8	451.9 / 496
	<b>(kg)</b>	87 / 106	108 / 128	110 / 130	190 / 209	205 / 225
<b>PHYSICAL / DS-BT</b>						
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	23.2×10.1×27.6 / 29.9×16.3×36.6	27.2×13.5×28.1 / 33.8×19.7×37.2	27.2×13.5×34.6 / 35.0×20.7×43.6	29.7×13.5×35.6 / 37.2×19.7×44.7	
	<b>L×W×H (mm)</b>	590×257×700 / 760×415×930	690×342×715 / 860×500×945	690×342×878 / 888×527×1108	755×342×905 / 945×500×1135	
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	270.9 / 319.4	350.5 / 396.8	529.1 / 571	590.8 / 634.9	633.2 / 670.7
	<b>(kg)</b>	123 / 145	159 / 180	240 / 259	268 / 288	287.5 / 304.5
<b>CONFORMANCE</b>						
<b>Approvals</b>	CE					

Specifications are subject to change without notice.

\* The external battery pack is optional. Battery pack needs to be connected to UPS before connecting any load and turning on the UPS.

# The model with optional USB port provides both RS232 and USB connectivity, but only one connectivity can be used at a time.



For Mac OS support please purchase the RS232 to USB cable.

# Durable Series

## DS6KB-RM / DS8KB-RM / DS10KB-RM / DS6KB-RMP / DS10KB-RMP



\* DS6KB-RM / DS8KB-RM / DS10KB-RM / DS6KB-RMP / DS10KB-RMP



### Features

- Online double conversion design
- Pure sine wave output with less than 3% THD
- Fully digitized microprocessor control
- Power factor correction
- Selectable UPS output voltage
- High efficiency mode
- Cold start function (DC power on)
- Emergency power off function (EPO)
- Short circuit and overload protection
- Fax / Modem / LAN data line surge protection
- Advanced battery management (ABM)
- Automatic battery charging in UPS OFF mode
- Automatic diagnostics and battery check-up
- Extended battery pack available
- Multilanguage LCD display
- RS232 and USB Communication ports, UPS monitoring software

### Specifications

Model Name	DS6KB-RM	DS8KB-RM	DS10KB-RM	DS6KB-RMP	DS10KB-RMP
Topology	True On-Line, Double Conversion, High Frequency				
On-battery Output Waveform	Pure Sine Wave		Pure Sine Wave / Parallel		
Maximum Capacity	6000VA / 4200W	8000VA / 5600W	10000VA / 7000W	6000VA / 4200W	10000VA / 7000W
Cabinet Type	3U Machine + 3U Battery Pack				
<b>INPUT</b>					
Nominal Input Voltage	220 / 230 / 240Vac				
Input Voltage Regulation	176-276Vac				
Nominal Input Frequency	50Hz / 60Hz Auto Sensing				
Parallel function (Total Parallel Number)	NA		Parallel up to 3 units (Total 4 units including mainframe)		
<b>OUTPUT</b>					
Nominal Output Voltage	220 / 230 / 240Vac				
Output Voltage Regulation	Rated Voltage $\pm 2\%$ (on battery)				
Transfer Time	0 ms				
Start on Battery	Yes				
Auto Restart	Yes				
<b>PROTECTION</b>					
Data Line Surge Protection	RJ11 / RJ45		NA		
Overload Protection	UPS shuts down at 130% load after 10 secs or 150% load after 2 secs				
Over Current Protection	Circuit Breaker				
Discharge Protection	Keylock				
<b>BATTERY</b>					
Backup Time (Full / Half load)	7 / 20 min	6 / 15 min	4 / 13 min	7 / 14 min	4 / 12 min
Recharge Time to 90% (Typical)	< 4 Hours				
Extended Battery Pack*	BP6000-RM	BP8000-RM	BP10000-RM	BP6000-RM	BP10000-RM
	240V (12V / 7.2AH $\times$ 20)	240V (12V / 7.2AH $\times$ 20)	240V (12V / 9AH $\times$ 20)	240V (12V / 7.2AH $\times$ 20)	240V (12V / 9AH $\times$ 20)
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>					
Front Panel	On / On Line / On Battery / Bypass / Fault and 15-UPS status				
Audible Alarms	Battery Mode / Battery Test / Replace Battery / Low Battery / UPS fault / Overload				
<b>COMMUNICATION INTERFACE</b>					
Communication Port	RS232 & USB*				
SNMP Manageable	Yes				
<b>ENVIRONMENTAL</b>					
Operation Temperature	0 $^{\circ}$ ~40 $^{\circ}$ C / 32 $^{\circ}$ ~104 $^{\circ}$ F				
Storage Temperature	-15 $^{\circ}$ ~50 $^{\circ}$ C / 5 $^{\circ}$ ~122 $^{\circ}$ F				
Relative Humidity	0~95% Non condensing				
Audible Noise	< 55 dBA				
<b>PHYSICAL / DS-B-RM</b>					
Dimensions	Physical / Packing (in)	23.3 $\times$ 16.9 $\times$ 5.1 / 29.3 $\times$ 22.2 $\times$ 11	25.9 $\times$ 16.9 $\times$ 5.1 / 31.7 $\times$ 22.3 $\times$ 11	26.4 $\times$ 16.9 $\times$ 5.1 / 32.7 $\times$ 22 $\times$ 11.0	
	L $\times$ W $\times$ H (mm)	597 $\times$ 428 $\times$ 130 / 745 $\times$ 565 $\times$ 273	657 $\times$ 428 $\times$ 130 / 805 $\times$ 565 $\times$ 280	672 $\times$ 428 $\times$ 130 / 819 $\times$ 566 $\times$ 280	
Weight (lbs)	44.1 / 52.9	52.9 / 61.7	50.7 / 59.5		
(Net / Gross) (kg)	20 / 24	24 / 28	23 / 27		
<b>PHYSICAL / DS-BP-RM</b>					
Dimensions	Physical / Packing (in)	23.5 $\times$ 16.9 $\times$ 5.1 / 28.7 $\times$ 21.5 $\times$ 14.5			
	L $\times$ W $\times$ H (mm)	597 $\times$ 428 $\times$ 130 / 740 $\times$ 560 $\times$ 370			
Weight (lbs)	145.5 / 166.5				
(Net / Gross) (kg)	66 / 75.5				
<b>CONFORMANCE</b>					
Approvals	CE				

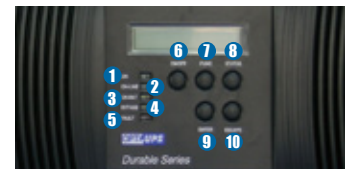
Specifications are subject to change without notice.

\* One external battery pack is included with above models. Battery pack needs to be connected to UPS before connecting any load and turning on the UPS. The additional battery packs and charge box are optional for long backup demands.

# The model with optional USB port provides both RS232 and USB connectivity, but only one connectivity can be used at a time.

### Front Panel

#### DS6KB-RM / DS10KB-RM



- |           |            |
|-----------|------------|
| 1 ON      | 6 ON / OFF |
| 2 ON-Line | 7 FUNC     |
| 3 ON-BAT  | 8 STATUS   |
| 4 BYPASS  | 9 ENTER    |
| 5 FAULT   | 10 ESCAPE  |

### Rear Panel

#### DS6KB-RM



#### DS10KB-RM



- |   |                            |
|---|----------------------------|
| A | Terminal Block             |
| B | Breaker                    |
| C | TVSS                       |
| D | External Battery Connector |
| E | USB                        |
| F | Communication Port         |
| G | SNMP Card Slot             |
| H | Maintenance Bypass Switch  |
| I | Input                      |
| J | RS232, EPO                 |

# Outdoor Series

Outdoor UPS is designed for telecommunication equipment, surveillance systems, illumination, gates. These units are made to withstand the outside weather changes. They are waterproof and can operate in high heat or low temperature climates. They incorporate such technological features as AVR, which stabilizes the voltage that feed into your system, and Auto Restart, which automatically turns UPS on once the main electrical power is restored after a prolonged blackout.



\* OD330-AL  
OD500 / OD1000

\* OD330

## OD330 / OD330-AL / OD500 / OD1000

### Features

- These UPS are made to be either wall mounted or used as a tower
- The battery charger is one of the fastest in the market
- Up to 8 hours of backup time
- LED display: battery backup, battery mode, battery fault
- EMI / RFI filtering
- IEC60529, IP-56 certified

### Specifications

Model Name	OD330	OD330-AL	OD500	OD1000
<b>Topology</b>	Line-Interactive, Low Frequency			
<b>On-battery Output Waveform</b>	Simulated Sine Wave			
<b>Maximum Capacity</b>	330VA / 200W	330VA / 200W	500VA / 300W	1000VA / 600W
<b>INPUT</b>				
<b>Nominal Input Voltage</b>	100 / 110 / 120 Vac or 220 / 230 / 240 Vac*			
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing			
<b>Input Voltage Range</b>	Rated Voltage $\pm 30\%$			
<b>OUTPUT</b>				
<b>Nominal Output Voltage</b>	100 / 110 / 120 Vac or 220 / 230 / 240 Vac*			
<b>Output Voltage Range</b>	Rated Voltage $\pm 5\%$ (on battery)			
<b>Start on Battery</b>	Yes			
<b>Auto Restart</b>	Yes			
<b>Automatic Voltage Regulation</b>	AVR increases the output voltage by 15% while the input voltage decreases by 9% to 15% AVR decreases the output voltage by 13% while the input voltage increases by 9% to 15%			
<b>PROTECTION</b>				
<b>Surge Energy Rating</b>	250 Joules			
<b>EMI / RFI Filter</b>	10db at 0.15 MHz, 50db at 30MHz			
<b>Overload Protection</b>	UPS shuts down at 110% load after 60 secs or 130% load after 3 secs			
<b>Over Current Protection</b>	Circuit Breaker			
<b>Ingress Protection Rating</b>	IP56 according to IEC60529			
<b>BATTERY</b>				
<b>Configuration</b>	12V (12V 100AH $\times 1$ ) (optional)	12V (12V 100AH $\times 1$ ) / 2 sets (optional)	24V (12V 100AH $\times 2$ ) (optional)	
<b>Charging Current</b>	10A	15A	10A	
<b>Battery Protection</b>	Discharge low voltage protection, battery failure warning			
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>				
<b>Front Panel</b>	AC Mode / Battery Mode / Battery Fault			
<b>COMMUNICATION INTERFACE</b>				
<b>SNMP Manageble</b>	Yes			
<b>ENVIRONMENTAL</b>				
<b>Working Environment</b>	3500 meters max., -20~60°C / -4~140°F			
<b>Storage Elevation</b>	0~15000 meters			
<b>Relative Humidity</b>	0~95% Non condensing			
<b>Audible Noise</b>	< 50 dBA			
<b>PHYSICAL</b>				
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	21 $\times$ 12.2 $\times$ 22.8 / 23 $\times$ 15.2 $\times$ 26.8		21 $\times$ 12.2 $\times$ 34.3 / 23 $\times$ 15.2 $\times$ 38.2
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	535 $\times$ 310 $\times$ 580 / 585 $\times$ 385 $\times$ 680		535 $\times$ 310 $\times$ 870 / 585 $\times$ 385 $\times$ 970
<b>Weight (Net / Gross)</b>	<b>lbs</b>	35.2 / 39.6	50.7 / 55.1	55.1 / 59.5
	<b>kg</b>	16 / 18	23 / 25	25 / 27
<b>Input / Output Connections</b>	Terminal blocks			

Specifications are subject to change without notice.

\* Models of these nominal voltages are available, however each model is preset to a certain nominal voltage, which is not user-changeable.



# Durable Series

For data centers and mission critical systems

**DS10KC33 / DS15KC33 / DS22.5KC33 /  
DS30KC33 / DS45KC33 / DS60KC33 /  
DS80KC33 / DS100KC33 / DS120KC33**

## Features

- Highest performance and reliability using DSP (Digital Signal Processor)
- SPWM (Sinewave Pulse Width Modulation) and IGBT to handle even the most difficult industrial applications
- User-friendly interface and multi-functional display allowing access to a variety of parameters
- Fax / Modem / LAN data line surge protection
- Advanced battery management (ABM)
- Automatic battery charging in UPS OFF mode
- Automatic diagnostics and battery check-up
- Extended battery pack available
- Multilanguage LCD display
- RS232 and USB Communication ports, UPS monitoring software

## Energy Saving :

With such high efficiency, you will save on energy consumption. This ensures lower operation costs and faster returns on your investments.

## Topology:

- Double Conversion

## Rating:

- 10KVA to 120KVA

## Voltage:

- 208V / 120V, 380V / 220V

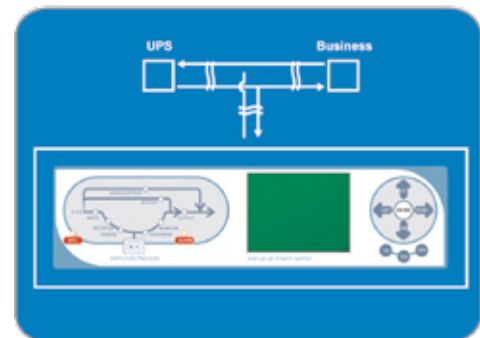
## Applications:

- Industrial
- Medical
- ISP / ASP / POP
- Servers
- Data Centers
- Telecommunications



## Front Panel

### DSC10-30KC33



### DSC45-120KC33



# Durable Series

DS10KC33 / DS15KC33 / DS22.5KC33 / DS30KC33 / DS45KC33 / DS60KC33 / DS80KC33 / DS100KC33 / DS120KC33

## Specifications

Model Name	DS10KC33	DS15KC33	DS22.5KC33	DS30KC33	DS45KC33	DS60KC33	DS80KC33	DS100KC33	DS120KC33	
<b>Topology</b>	True On-Line, Double Conversion, Low Frequency									
<b>On-battery output Waveform</b>	Pure Sine Wave									
<b>Maximum Capacity</b>	10KVA / 8KW	15KVA / 12KW	22.5KVA / 18KW	30KVA / 24KW	45KVA / 36KW	60KVA / 48KW	80KVA / 64KW	100KVA / 80KW	120KVA / 96KW	
<b>INPUT</b>										
<b>Nominal Input voltage</b>	380V / 220V or 208V / 120V									
<b>Input Phase and Wire</b>	3 Phase 3 Wire / 3 Phase 4 Wire and ground									
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto-sensing									
<b>Input Voltage Range</b>	Related voltage $\pm 20\%$									
<b>Rectification Pulse</b>	6 pulses or 12 pulses (optional)									
<b>OUTPUT</b>										
<b>Nominal Output Voltage</b>	380V / 220V or 208V / 120V									
<b>Output Phase and Wire</b>	3 Phase 3 wire / 3 Phase 4 wire and ground									
<b>Nominal Output Frequency</b>	50Hz / 60Hz									
<b>Frequency Regulation</b>	$\pm 0.1\%$									
<b>Frequency Lock Range</b>	$\pm 5$ Hz									
<b>THD (Linear Load)</b>	<3%									
<b>Output Voltage Regulation</b>	Related voltage $\pm 1\%$									
<b>Transfer Time (Typical)</b>	0 ms									
<b>Start on battery</b>	Yes									
<b>Auto Restart</b>	Yes									
<b>STATIC SWITCH</b>										
<b>Operation</b>	UPS bypasses as the inverter and the utility are synchronized									
<b>Efficiency</b>	> 99%									
<b>CHARGER</b>										
<b>Voltage</b>	410V									
<b>Current</b>	1A / 2A / 3A / 5A / 10A / 15A / 20A / 30A automatically adjustable									
<b>Charge Time to 90% (Typical)</b>	<4 Hours									
<b>BATTERY</b>										
<b>Configuration</b>	Battery Pack with 12V*30 pcs									
<b>Backup time</b>	Depends on overall battery capacity									
<b>PROTECTION</b>										
<b>Overload Protection</b>	UPS shuts down at 110% load after 30 mins or 135% load after 30 secs									
<b>Over Current Protection</b>	Circuit breaker									
<b>ENVIRONMENTAL</b>										
<b>Operation Temperature</b>	0 $^{\circ}$ ~40 $^{\circ}$ C / 32 $^{\circ}$ ~104 $^{\circ}$ F									
<b>Storage Temperature</b>	-25~55 $^{\circ}$ C / -13~130 $^{\circ}$ F									
<b>Ambient operation</b>	0-95% Non condensing									
<b>Audible Noise</b>	<60 dBA									
<b>PHYSICAL</b>										
<b>380V / 220V</b>										
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	34.4*20.9*39.8 / 39.8*26.6*48.4		37.8*20.9*46.4 / 42.9*26.6*59.4		31.5*29.5*66.9 / 36.8*34.8*75			31.5*43.3*70.9 / 36.2*48.0*79.1	
	<b>L*W*H (mm)</b>	875*530*1010 / 1010*675*1230		960*530*1180 / 1090*675*1510		800*750*1700 / 935*885*1905			800*1100*1800 / 920*1220*2010	
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	733.5 / 817.2	755.5 / 839.2	759.9 / 865.6	907.5 / 1013.2	1198.2 / 1418.5	1389.9 / 1610.1	1656.4 / 1881.1	1924.7 / 2153.9	2403.1 / 2579.4
	<b>(kg)</b>	333 / 371	343 / 381	345 / 393	412 / 460	544 / 644	631 / 731	752 / 854	873 / 977	1090 / 1170
<b>208V / 120V</b>										
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	34.4*20.9*39.8 / 39.8*26.6*48.4		37.8*20.9*46.4 / 42.9*26.6*59.4		31.5*29.5*66.9 / 36.8*34.8*75		31.5*43.3*70.9 / 36.2*48.0*79.1		TBD
	<b>L*W*H (mm)</b>	875*530*1010 / 1010*675*1230		960*530*1180 / 1090*675*1510		800*750*1700 / 935*885*1905		800*1100*1800 / 920*1220*2010		TBD
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	940.5 / 1024.2	1019.8 / 1103.5	1006.6 / 1112.3	1196 / 1301.8	1616.7 / 1837	1874.4 / 2094.7	2830.8 / 2998.3	3073.3 / 3240.8	TBD
	<b>(kg)</b>	427 / 465	463 / 501	457 / 505	543 / 591	734 / 834	851 / 951	1284 / 1360	1394 / 1470	TBD

Specifications are subject to change without notice.



PC & WORKSTATION

SOHO & WORKSTATION

NETWORK & SERVER

DATA CENTER & FACILITY

SOFTWARE

HOME & OFFICE APPLIANCES

FACTORY & AUTOMATION EQUIPMENT

# Durable Series

DS10KC33 / DS15KC33 / DS22.5KC33 / DS30KC33 / DS45KC33 /  
DS60KC33 / DS80KC33 / DS100KC33 / DS120KC33

## Specifications

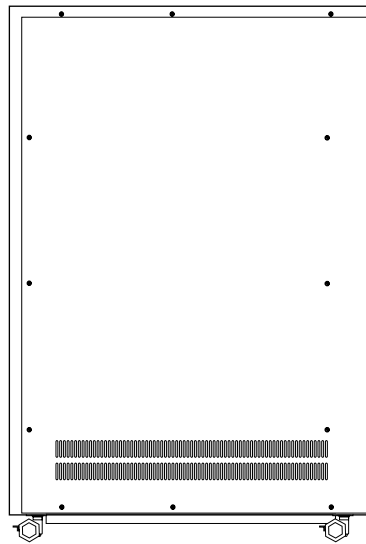
Cabinet Type	BP007A302P	BP034W302P	BP017A301P	BP017A302P
Battery	7.2AH×30 pcs×2 Sets, total 60 pcs	1234W×30 pcs×2 Sets, total 60 pcs	12V / 17AH×30 pcs×1 Set, total 30 pcs	12V / 17AH×30 pcs×2 Sets, total 60 pcs
DC Voltage	360 VDC		360 VDC	
Cabinet Dimension (L×W×H)	600×344×657mm		683×400×1010mm	
Shipping Dimension (L×W×H)	820×530×870mm		930×670×1240mm	
Empty Cabinet (Net / Gross Weight)	50 / 68 kg		51 / 84 kg	
With Battery (Net / Gross Weight)	203 / 221kg	208 / 226 kg	226 / 310 kg	449 / 493 kg

Cabinet Type	BP026A301P	BP040A302P	BP065A301P	BP100A301P
Battery	26AH×30 pcs×1 Set, total 30 pcs	40AH×30 pcs×2 Sets, total 60 pcs	65AH×30 pcs×1 Set, total 30 pcs	100AH×30 pcs×1 Set, total 30 pcs
DC Voltage	360 VDC		360 VDC	
Cabinet Dimension (L×W×H)	639×400×1010mm		800×1100×1700mm	
Shipping Dimension (L×W×H)	820×670×1240mm		850×1150×1840mm	
Empty Cabinet (Net / Gross Weight)	65 / 109 kg		402 / 437 kg	
With Battery (Net / Gross Weight)	340 / 384 kg	1272 / 1307 kg	1056 / 1091 kg	1458 / 1493 kg

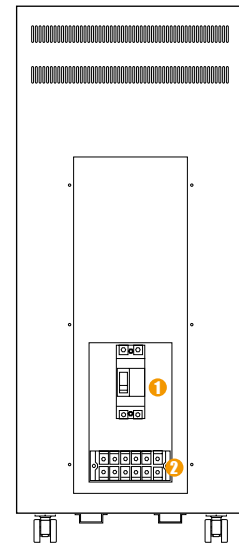
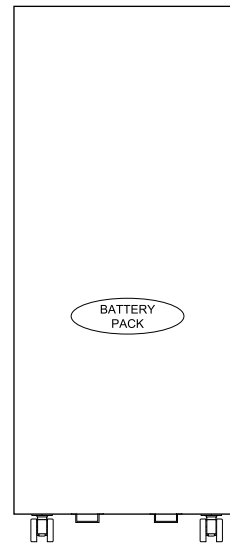
Side View



Front View



Rear View



- ① Main Power Switch
- ② Terminal Block

# Durable Series

**DS10KD33 / DS15KD33 /  
DS20KD33 / DS30KD33 /  
DS40KD33 / DS50KD33 /  
DS60KD33 / DS80KD33 /  
DS100KD33 / DS120KD33 /  
DS160KD33 / DS200KD33 /  
DS240KD33 / DS300KD33 /  
DS320KD33 / DS400KD33 /  
DS500KD33**



\* DSD33

## Features

- True galvanic isolation design ensures that such serious AC mains problems as noise, lightning effects or leakage current do not reach your systems.
- Protection from the accidental disconnection of the neutral wire ensures the safety of the UPS and the stability of the power supply.
- Protection from incorrect operation ensures that violating the operation procedures will not lead to UPS or connected equipment damage.
- The use of up-to-date DSP, IGBT and switching components ensures the high reliability and efficiency of the UPS.
- Multi-CPU design increases the system reliability.
- Plug-and-play design and easy access to boards ensures the fastest and easiest UPS maintenance.
- Individual inverter for each phase ensures stable work under completely unbalanced load.
- Intelligent charger with temperature compensation feature ensures the longest possible battery life. The adjustable level of charging current allows the UPS to work with large battery banks for long backup time.
- Intelligent battery test logics eliminate the possibility of power supply interruption during battery test in case of batteries being bad. Provides the detection of battery electrolyte leakage and improper battery grounding.
- Intelligent fan speed control increases the fan life expectancy and reduces the audible noise.
- Advanced heat abstraction design by physical separation of the power and control circuitry ensures the smooth operation of the UPS under most harsh conditions.
- Cold start function makes it possible to start the UPS even when AC mains are not providing the power.
- 12-pulse rectifier ensures reduced harmonics for UPS with capacities of 80KVA and higher.
- Input harmonic filter reduces the Total Harmonic Distortion (T.H.D.) of the UPS.
- Parallel operation makes it possible to upgrade the UPS to a larger capacity.

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# Durable Series

DS10KD33 / DS15KD33 / DS20KD33 / DS30KD33 / DS40KD33 /  
DS50KD33 / DS60KD33 / DS80KD33 / DS100KD33

## Specifications

Model Name	DS10KD33	DS15KD33	DS20KD33	DS30KD33	DS40KD33	DS50KD33	DS60KD33	DS80KD33	DS100KD33	
Topology	True On-Line, Double Conversion									
On-battery output Waveform	Pure Sine Wave									
Maximum Capacity	10KVA / 8KW	15KVA / 12KW	20KVA / 16KW	30KVA / 24KW	40KVA / 32KW	50KVA / 40KW	60KVA / 48KW	80KVA / 64KW	100KVA / 80KW	
<b>INPUT</b>										
Nominal Input Voltage	380 / 400 / 415Vac									
Input Phase and Wire	3 Phase 4 Wire and ground									
Nominal Input Frequency	50 / 60 Hz $\pm$ 7%									
Input Voltage Range	Rated Voltage $\pm$ 20%									
Rectification Pulse	6 pulses or 12 pulses (optional)									
<b>OUTPUT</b>										
Output Voltage	380 / 400 / 415Vac									
Output Phase and Wire	3 Phase 4 Wire and ground									
Nominal Output Frequency	50Hz / 60Hz									
Frequency Lock Range	$\pm$ 5 Hz									
THD (Linear Load)	< 5 %									
Output Voltage Regulation	Rated Voltage $\pm$ 1%									
Transfer Time (Typical)	0 ms									
Start on battery	Yes									
Auto Restart	Yes									
<b>STATIC SWITCH</b>										
Operation	UPS bypasses as the inverter and the utility are synchronized									
Efficiency	99.50%									
<b>CHARGER</b>										
Voltage	397V									
Current	1A	1.5A	2A	3A	4A	5A	6A	8A	10A	
Charge Time to 90% (Typical)	<4 Hours									
<b>BATTERY</b>										
Configuration	Battery Pack with 12V $\times$ 29 pcs									
Backup time	Depends on overall battery capacity									
<b>PROTECTIONS</b>										
Overload Protection	UPS shuts down at 110% load after 15 mins, at 135% load after 10 mins or 150% load after 30 secs									
Over Current Protection	Circuit breaker									
<b>ENVIRONMENTAL</b>										
Operation Temperature	0~40°C / 32~104°F									
Storage Temperature	-25~55°C / -13~130°F									
Ambient operation	0 - 95% Non condensing									
Audible Noise	< 60 dBA							< 67 dBA		
<b>PHYSICAL</b>										
Dimensions	Physical / Packing (in)	31.5 $\times$ 21.7 $\times$ 63 / 37.4 $\times$ 27.6 $\times$ 73.6							31.5 $\times$ 43.3 $\times$ 63 / 37.4 $\times$ 49.2 $\times$ 73.6	
	L $\times$ W $\times$ H (mm)	800 $\times$ 550 $\times$ 1600 / 950 $\times$ 700 $\times$ 1870							800 $\times$ 1100 $\times$ 1600 / 950 $\times$ 1250 $\times$ 1870	
Weight (Net / Gross)	(lbs)	661 / 738	793 / 870	881 / 958	1035 / 1112	1145 / 1222	1233 / 1311	1388 / 1465	2159 / 2280	2841 / 2963
	(kg)	300 / 335	360 / 395	400 / 435	470 / 505	520 / 555	560 / 595	630 / 665	980 / 1035	1290 / 1345

Specifications are subject to change without notice.

# Durable Series

**DS120KD33 / DS160KD33 / DS200KD33 / DS240KD33 /  
DS300KD33 / DS320KD33 / DS400KD33 / DS500KD33**

## Specifications

Model Name	DS120KD33	DS160KD33	DS200KD33	DS240KD33	DS300KD33	DS320KD33	DS400KD33	DS500KD33
<b>Topology</b>	True On-Line, Double Conversion							
<b>On-battery output Waveform</b>	Pure Sine Wave							
<b>Maximum Capacity</b>	120KVA / 96KW	160KVA / 128KW	200KVA / 160KW	240KVA / 192KW	300KVA / 240KW	320KVA / 256KW	400KVA / 320KW	500KVA / 400KW
<b>INPUT</b>								
<b>Nominal Input Voltage</b>	380 / 400 / 415Vac							
<b>Input Phase and Wire</b>	3 Phase 4 Wire and ground							
<b>Nominal Input Frequency</b>	50 / 60 Hz $\pm$ 7%							
<b>Input Voltage Range</b>	Rated Voltage $\pm$ 20%							
<b>Rectification Pulse</b>	6 pulses or 12 pulses (optional)							
<b>OUTPUT</b>								
<b>Output Voltage</b>	380 / 400 / 415Vac							
<b>Output Phase and Wire</b>	3 Phase 4 Wire and ground							
<b>Nominal Output Frequency</b>	50Hz / 60Hz							
<b>Frequency Lock Range</b>	$\pm$ 5 Hz							
<b>THD (Linear Load)</b>	< 5 %							
<b>Output Voltage Regulation</b>	Rated Voltage $\pm$ 1%							
<b>Transfer Time (Typical)</b>	0 ms							
<b>Start on battery</b>	Yes							
<b>Auto Restart</b>	Yes							
<b>STATIC SWITCH</b>								
<b>Operation</b>	UPS bypasses as the inverter and the utility are synchronized							
<b>Efficiency</b>	99.50%							
<b>CHARGER</b>								
<b>Voltage</b>	397V							
<b>Current</b>	12A	16A	20A	24A	30A	32A	40A	50A
<b>Charge Time to 90% (Typical)</b>	<4 Hours							
<b>BATTERY</b>								
<b>Configuration</b>	Battery Pack with 12V $\times$ 29 pcs							
<b>Backup time</b>	Depends on overall battery capacity							
<b>PROTECTIONS</b>								
<b>Overload Protection</b>	UPS shuts down at 110% load after 15 mins, at 135% load after 10 mins or 150% load after 30 secs							
<b>Over Current Protection</b>	Circuit breaker							
<b>ENVIRONMENTAL</b>								
<b>Operation Temperature</b>	0~40°C / 32~104°F							
<b>Storage Temperature</b>	-25~55°C / -13~130°F							
<b>Ambient operation</b>	0 - 95% Non condensing							
<b>Audible Noise</b>	< 67 dBA		< 70 dBA				< 80 dBA	
<b>PHYSICAL</b>								
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	31.5 $\times$ 43.3 $\times$ 63 / 37.4 $\times$ 49.2 $\times$ 73.6			31.5 $\times$ 86.6 $\times$ 63 / 37.4 $\times$ 98.4 $\times$ 73.6		31.5 $\times$ 130 $\times$ 63 / 37.4 $\times$ 147.6 $\times$ 73.6	31.5 $\times$ 173.2 $\times$ 63 / 37.4 $\times$ 196.9 $\times$ 73.6
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	800 $\times$ 1100 $\times$ 1600 / 950 $\times$ 1250 $\times$ 1870			800 $\times$ 2200 $\times$ 1600 / 950 $\times$ 2500 $\times$ 1870		800 $\times$ 3300 $\times$ 1600 / 950 $\times$ 3750 $\times$ 1870	800 $\times$ 4400 $\times$ 1600 / 950 $\times$ 5000 $\times$ 1870
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	3040 / 3161	3568 / 3689	5396 / 5639	5771 / 6013	6520 / 6762	9394 / 9637	10771 / 11013
	<b>(kg)</b>	1380 / 1435	1620 / 1675	2450 / 2560	2620 / 2730	2960 / 3070	4265 / 4375	4890 / 5000

Specifications are subject to change without notice.



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# Durable Series

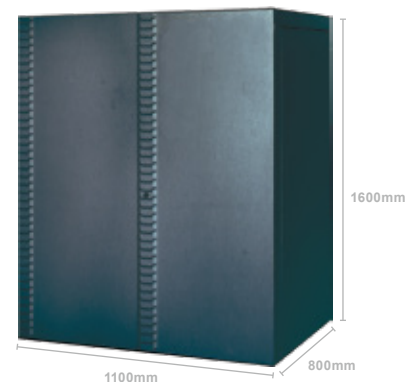
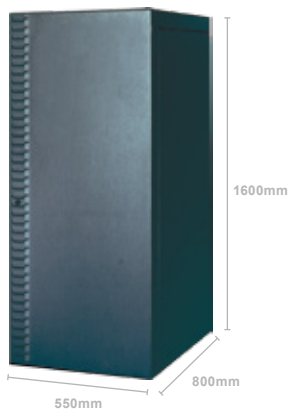
DS10KD33 / DS15KD33 / DS20KD33 / DS30KD33 / DS40KD33 / DS50KD33 /  
DS60KD33 / DS80KD33 / DS100KD33 / DS120KD33 / DS160KD33 / DS200KD33 /  
DS240KD33 / DS300KD33 / DS320KD33 / DS400KD33 / DS500KD33

## Battery Cabinet Design

The battery cabinet is designed with the same size and outlook as the UPS for convenience of installation when several cabinets of UPS and battery are aligned together. It can accommodate Lead Acid maintenance free batteries 12V×29 pcs (1 set) or 58 pcs (2 sets).

## Battery Cabinet Specifications

Cabinet Type	BP026A291S	BP026A292S	BP075A291S	BP088A291S	BP100A291S
Battery	12V 26AH×29 pcs×1set, total 29 pcs	12V 26AH×29 pcs×2 sets, total 58 pcs	12V 75AH×29 pcs×1 set, total 29 pcs	12V 88AH×29 pcs×1 set, total 29 pcs	12V 100AH×29 pcs×1 set, total 29 pcs
DC Voltage	348 VDC		348 VDC		
Cabinet Dimension (W×D×H)	550×800×1600mm		1100×800×1600mm		
Packing Dimension (W×D×H)	700×950×1870mm		1250×950×1870mm		
Empty Cabinet (Net / Gross Weight)	158 / 193 kg		250 / 305 kg		
With Battery (Net / Gross Weight)	410 / 445 kg	690 / 725 kg	1020 / 1075 kg	1130 / 1185 kg	1270 / 1325 kg



# Software



## OPTI-UPS Monitoring Software

### Protect your data, money and reputation!

A robust battery and fine electronic design of your UPS is only a part of a professional power protection system! Imagine if there is a blackout, or even worse, an AC line power problem that would permanently damage your equipment.

### What would a quality UPS do?

It would go to backup mode to protect your equipment and data. But the batteries sooner or later would become depleted, and then what? You still have a power down situation.

### Make sure the files are saved and OS is shut down correctly!

Does the possibility of having hours and hours of hard work lost, billing information corrupted, or web servers standing idle disturb you?

All of these problems do not concern you if you have an OPTI-UPS software package at your disposal. Not only does it perform the basic functions of event notification, logging, scheduling and shutdown, but it also provides these great features:

- Remote monitoring and control over your UPS and connected equipment
- Power parameters logging
- Shutdown of all systems powered by UPS
- Independent outlet control
- SNMP support and a lot more
- Graphical gauges display UPS load, battery conditions, UPS state, main power characteristics and tasks scheduled for today
- Software allows you to set the main power safe parameters of your system, including alarm module parameters and its tolerance, the time you wish to wait for an AC line to restore before you start shutdown sequence, software language and others.
- You can set the system to notify you of any event either by pager or email with a customized message.
- The nicely designed scheduler allows you to set a flexible schedule to perform various tasks, including shutdown and startup of your PC or other equipment.
- Multiple OS
- Multilingual

## RS232-USB Adapter



For Mac OS support please purchase the RS232 to USB cable.

# Software

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## OPTI-UPS .NETpower SNMP Card and Box

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SNMP Card



SNMP Box

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The OPTI-UPS .NETpower SNMP CARD and SNMP box provide you with most powerful UPS management and monitoring functions. No more need to have a PC directly connected to UPS for these purposes. A compact card inserted into SNMP card slot of your PS-B or DS-B UPS series or a miniature SNMP box connected to ES-C or TS-Bseries make your UPS a full featured power protection system ready for remote control via Internet / Intranet or even public telephone network.

.NETpower SNMP card / box has all capability of OPTI-SAFE software including SNMP support plus several valuable UPS management functions.

SNMP (Simple Network Management Protocol) is an industrial standard used for network management, which allows you to incorporate your OPTI power protection devices into your company's unified monitoring system based on such products as HP OpenView, IBM NetView or others.

The NETpower SNMP card / box has these great capabilities.

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### Network Management

.NETpower SNMP card / box supports telnet management and web management via HTTP 1.0 protocol combined with HTML, Java Script and Java Applet.

SOFTWARE

### SNMP Network Management

.NETpower card / box supports SNMP v1.0 and v2.0, RFC 1213 (MIB-II), RFC 1628 (UPS MIB) and private UPS extension MIB. It is compatible with any standard SNMP NMS such as HP OpenView, IBM NetView or others.

### Serial port

Serial Port can be used as a console port or can be connected to a modem allowing PPP dial-in and paging.

### Network Interface

UTP Fast Ethernet 10 / 100 auto-sense network interface is provided.

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### Extension Port

.NETpower SNMP card / box can be connected to an extension device such as temperature / humidity / smoke sensors, etc. and supply additional information provided by them.

### Real Time Clock

Time can be adjusted by SNTP (Simple Network Time Protocol).

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### Setup / Configuration

.NETpower SNMP card / box can be set up via telnet or console.

### Firmware upgradeable

Firmware can be upgraded via a web browser or via TFTP (Trivial File Transfer Protocol)

# Stabilizer Series



\* SS1200 / SS2000

## SS1200 / SS2000

### Features

- Plug-and-play
- Automatically adjust low or high voltages
- Wide input voltage range ( $\pm 15\%$ )
- Dependable output voltage regulation ( $\pm 5\%$ )
- LED indicators
- Suitable for home and office equipment
- Input overload, lightning and surge protection
- Over 95% efficiency for better power savings

### Specifications

Model Name	SS1200	SS2000
Topology	Low Frequency / Relay Type	
Maximum Capacity (VA / W)	1000VA / 500W	2000VA / 1000W
Wave Form	Sine Wave	
<b>AC INPUT</b>		
Phase	1Ø2W	
Nominal Input Voltage	120Vac or 230Vac	
Nominal Input Frequency	50Hz / 60Hz Auto Sensing	
Input Voltage Range	Rated Voltage $\pm 15\%$	
<b>AC OUTPUT</b>		
Phase	1Ø2W	
Nominal Input Voltage	120Vac or 230Vac	
Output Voltage Regulation	Rated Voltage $\pm 5\%$	
Nominal Input Frequency	50Hz / 60Hz Auto Sensing	
Number of Outlets	120 Vac / 230Vac : 6 outlets (US) 230Vac : 4 outlets (German), 1 outlet (UK)	
Efficiency	> 95%	
<b>PROTECTION</b>		
Over Current Protection	Circuit Breaker	
Surge Energy Rating	525 Joules	
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>		
Front Panel	Normal mode / Boost / Bulk	
<b>ENVIRONMENTAL</b>		
Temperature	0 $^{\circ}$ ~40 $^{\circ}$ C / 32 $^{\circ}$ ~104 $^{\circ}$ F	
Humidity	0~95% Non condensing	
<b>HEAT SINK</b>		
Type	Heat Release Apertures	
<b>PHYSICAL</b>		
Dimensions	Physical / Packing (in)	5.35x4.02x4.84 / 7.67x5.75x4.92
	LxWxH (mm)	136x102x123 / 195x146 x125
Weight (Net / Gross)	(lbs)	3.3 / 3.5
	(kg)	1.5 / 1.6

Specifications are subject to change without notice.

### Front Panel

#### SS1200 / SS2000



- 1 Buck
- 2 Normal Mode
- 3 Boost

### Rear Panel

#### SS1200 / SS2000



- A On / Off switch and circuit breaker
- B Data Line Protection

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# Stabilizer Series

## SS3000M / SS4000M / SS5000M

### Features

- 8 outlets for US(NEMA) type; 6 outlets for German(Schuko) type
- Automatically regulates high and low voltages
- Internet, ADSL, Tel / Fax / Data line surge protection
- Input overload protection circuit breaker
- User-friendly visual indicators



\* SS3000M / SS4000M / SS5000M

### Specifications

Model Name	SS3000M	SS4000M	SS5000M		
<b>Topology</b>	Low Frequency / Relay Type				
<b>Maximum Capacity (VA / W)</b>	3000VA / 1500W	4000VA / 2000W	5000VA / 2500W		
<b>Wave Form</b>	Sine Wave				
<b>AC INPUT</b>					
<b>Phase</b>	1Ø2W				
<b>Nominal Input Voltage</b>	120Vac or 230Vac				
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing				
<b>Input Voltage Range</b>	Rated Voltage - 30% / + 25%				
<b>AC OUTPUT</b>					
<b>Phase</b>	1Ø2W				
<b>Nominal Input Voltage</b>	120Vac or 230Vac				
<b>Output Voltage Regulation</b>	Rated Voltage ±10%				
<b>Nominal Input Frequency</b>	50Hz / 60Hz Auto Sensing				
<b>Number of Outlets</b>	120 Vac / 230 Vac : 8 outlets (US) 230Vac : 6 outlets (German)				
<b>Efficiency</b>	> 95%				
<b>PROTECTION</b>					
<b>Over Current Protection</b>	Circuit Breaker				
<b>Surge Energy Rating</b>	525 Joules				
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>					
<b>Front Panel</b>	Power On / Boost / Buck / Voltage Meters				
<b>ENVIRONMENTAL</b>					
<b>Operation Temperature</b>	0°~40°C / 32°~104°F				
<b>Humidity</b>	0~95% Non condensing				
<b>HEAT SINK</b>					
<b>Type</b>	Heat Release Apertures				
<b>PHYSICAL</b>					
<b>Dimensions</b>	<b>Physical / Packing (L×W×H)</b>	<b>(in)</b>	9.84×6.18×6.18 / 12.87×7.83×7.83		
		<b>(mm)</b>	250×157×157 / 327×199×199		
<b>Weight (Net / Gross)</b>		<b>(lbs)</b>	3.3 / 3.5	3.3 / 3.5	3.3 / 3.5
		<b>(kg)</b>	4.5 / 4.75	5.25 / 5.5	6.9 / 7.15

Specifications are subject to change without notice.

### Front Panel

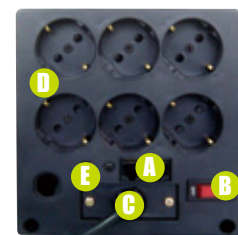
#### SS3000M / SS4000M / SS5000M



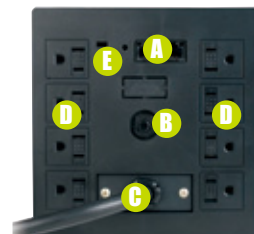
- 1 Buck LED
- 2 Power ON/OFF LED
- 3 Boost LED
- 4 Input Voltage Meter
- 5 Output Voltage Meter
- 6 Power ON/OFF switch

### Rear Panel

#### SS3000M / SS4000M / SS5000M



230V  
German (Schuko)



120V/230V  
US (NEMA)

- A Internet, ADSL, Fax/Modem protection
- B Input Breaker
- C AC Input
- D AVR Protection outlets
- E Soft start(Delay time) setting switch: to set different delay time with 2, 10, or 30 seconds per your demand

# Stabilizer Series

SS3K11 / SS5K11 / SS7.5K11 / SS10K11 / SS15K11 /  
 SS20K11 / SS5K33 / SS7.5K33 / SS10K33 / SS15K33 /  
 SS20K33 / SS30K33 / SS45K33 / SS60K33 / SS75K33 /  
 SS100K33 / SS125K33 / SS150K33 / SS175K33



## Features

- Servo type voltage regulator
- Input: wide range  $\pm 15\%$  with standard Delta / Delta, Delta / Wye, and Wye / Wye three phase designs
- Extremely tight voltage regulation available for sensitive loads
- Regulation with no wave form distortion
- Shielded isolation transformer (H class 180°C)
- Automatic over and under voltage protection
- Built-in surge suppressor (MOVs)
- High overload capability
- Efficiency: Low impedance design with a typical efficiency of 97%
- Modular design

- Low maintenance cost
- Control circuit bypass switch
- Extremely tight voltage regulation available for sensitive loads
- Regulation with no wave form distortion
- Enclosure design minimizes audible noise

## Applications

- Factory Automation Equipment
- Factory Automation Process Control

## Specifications

Model Name	SS3K11	SS5K11	SS7.5K11	SS10K11	SS15K11	SS20K11	
Topology	Low Frequency / Servo Type						
Power Factor	0.97						
Maximum Capacity	3000VA	5000VA	7500VA	10KVA	15KVA	20KVA	
<b>AC INPUT</b>							
Input Voltage	1Ø2w: 110, 220, 380, 415V; 1Ø3w: 110 / 220, 120 / 240V						
Input Frequency	50 or 60Hz $\pm 5\%$						
Phase	1Ø2w, 1Ø3w						
Input Voltage Range	+15% ~ -15%; +10% ~ -20%; +20% ~ -20%; +20% ~ -30%						
Power Factor	100%						
<b>AC OUTPUT</b>							
Output Voltage	1Ø2w: 110, 220, 380, 415V; 1Ø3w: 110 / 220, 120 / 240V						
Output Frequency	50 or 60Hz $\pm 5\%$						
Phase	1Ø2w, 1Ø3w						
Output Regulation	$\pm 1\%$ or better						
Correction Rate	$\pm 10\%$						
Wave Distortion	No wave form distortion						
Harmonic Distortion	None added to system						
Efficiency	97% up at full load (typical)						
Response	100ms ~ 3 sec. (10% Overload, 1 hours; 25% Overload, 10 minutes; 50% Overload, 1 minute)						
Load Power Factor	0 lagging to 0 leading						
Protection	Over / Under voltage, Overload, Phase Sequence Error, Overheat, Short circuit, Manual Restart, Maintenance Bypass Switch, High Energy Surge Absorber						
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>							
Front Panel	Voltage meter, Current meter						
Audible Alarms	Less than 60 dBA at 1m						
<b>ENVIRONMENTAL</b>							
Operation Temperature	10~40°C / 50~104°F						
Operating Altitude	1,000 meter without deracinating						
Relative Humidity	0~90%.non-condensing						
Cooling	Self cooling or fan assisted						
Heat Dissipation (Kcal)	102.3	170.5	255.75	341	511.5	682	
<b>PHYSICAL</b>							
Dimensions	Physical / Packing (in)	18.11×10.43×11.41 / 24.09×16.41×20.07			16.53×16.53×21.06 / 22.52×22.52×29.72		
	L×W×H (mm)	460×265×290 / 612×417× 510			420×420×535 / 572×572×755		
Weight (Net / Gross)	(lbs)	66.14 / 99.21	77.16 / 110.23	88.18 / 121.25	132.28 / 145	176.37 / 227.1	187.39 / 238.1
	(kg)	30 / 45	35 / 50	40 / 55	45 / 68	80 / 103	85 / 108

Specifications are subject to change without notice.

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# Stabilizer Series

SS5K33 / SS7.5K33 / SS10K33 / SS15K33 / SS20K33 / SS30K33 / SS45K33 /  
SS60K33 / SS75K33 / SS100K33 / SS125K33 / SS150K33 / SS175K33

## Specifications

Model Name	SS5K33	SS7.5K33	SS10K33	SS15K33	SS20K33	SS30K33	SS45K33	SS60K33	SS75K33	SS100K33	SS125K33	SS150K33	SS175K33				
Topology	Low Frequency / Servo Type																
Power Factor	0.97																
Maximum Capacity	5000VA	7500VA	10KVA	15KVA	20KVA	30KVA	45KVA	60KVA	75KVA	100KVA	125KVA	150KVA	175KVA				
<b>AC INPUT</b>																	
Input Voltage	3Ø3w: 220, 380, 415, 440V 3Ø4w: 190 / 110, 220 / 11, 208 / 120, 133 / 230, 220 / 380, 231 / 400, 240 / 415, 254 / 440V																
Input Frequency	50 or 60Hz±5%																
Phase	3Ø3w, 3Ø4w																
Input Voltage Range	+15% ~ -15%; +10% ~ -20%; +20% ~ -20%; +20% ~ -30%																
Power Factor	100%																
<b>AC OUTPUT</b>																	
Output Voltage	3Ø3w: 220, 380, 415, 440V 3Ø4w: 190 / 110, 220 / 115, 208 / 120, 133 / 230, 220 / 380, 231 / 400, 240 / 415, 254 / 440V																
Output Frequency	50 or 60Hz±5%																
Phase	3Ø3w, 3Ø4w																
Output Regulation	±1% or better																
Correction Rate	±10 %																
Wave Distortion	No wave form distortion																
Harmonic Distortion	None added to system																
Efficiency	97% up at full load (typical)																
Response	100ms ~ 3 sec. (10% Overload, 1 hours; 25% Overload, 10 minutes; 50% Overload, 1 minute)																
Load Power Factor	0 lagging to 0 leading																
Protection	Over / Under voltage, Overload, Phase Sequence Error, Overheat, Short circuit, Manual Restart, Maintenance Bypass Switch, High Energy Surge Absorber																
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>																	
Front Panel	Voltage meter, Current meter																
Audible Alarms	Less than 60 dBA at 1 m																
<b>ENVIRONMENTAL</b>																	
Operation Temperature	10~40°C / 50~104°F																
Operating Altitude	1,000 meter without derating																
Relative Humidity	0~90%, non-condensing																
Cooling	Self cooling or fan assisted																
Heat Dissipation (Kcal)	170.5	255.75	341	511.5	682	1023	1534.5	2046	2557.5	3410	4262.5	5115	5967.5				
<b>PHYSICAL</b>																	
Dimensions	Physical / Packing (in)	26.18×14.17×22.05 / 30.71×20.15×30.71			27.56×14.96×24.02 / 32.68×20.94×33.54			32.677×17.716×27.165 / 38.66×23.7×35.83			43.7×21.65×39.37 / 49.68×27.64×48.03			37.8×21.6x 57.09 / 43.78 x27.64x65.75		43.31x27.56x 73.62 / 49.21 x33.46x82.28	
	L×W×H (mm)	665×360×560 / 817×512×780			700×380×610 / 852×532×830			830×450×690 / 982 ×602×910			1110×550×1000 / 1262×702× 1220			960x550 x1450 / 1112 x702x1670		1100x700 x1870 / 1250 x852x2090	
Weight (Net / Gross)	(lbs)	187.39 / 251.33	194.0 / 257.94	198.41 / 262.35	209.44 / 273.37	253.53 / 321.87	286.6 / 354.94	396.83 / 485.01	440.92 / 529.11	617.29 / 758.39	727.53 / 868.62	837.75 / 978.85	992.08 / 1155.22	1058.22 / 1294.11			
	(kg)	85 / 114	88 / 117	90 / 119	95 / 124	115 / 146	130 / 161	180 / 220	200 / 240	280 / 344	330 / 394	380 / 444	450 / 524	480 / 587			

Specifications are subject to change without notice.

# Stabilizer Series



**SS200K33 / SS300K33 / SS400K33 / SS500K33 /  
SS600K33 / SS800K33 / SS1000K33 / SS1250K33**

## Features

- Input: wide range  $\pm 15\%$  with standard Delta / Delta or Wye / Wye three phase designs
- Extremely tight voltage regulation available for sensitive loads
- Regulation with no wave form distortion
- No addition harmonic distortion
- Automatic command control
- Rugged construction
- High power factor
- High overload capability
- Efficiency: Low impedance design with a typical efficiency of 98%
- Modular design
- Low maintenance costs
- Optimal reliability, simple concept
- Enclosure design minimizes audible noise

## Applications

- Anodizing and plating
- Automotive parts
- Cement manufacturing
- Compressor
- Electrochemical processes
- High-voltage power supplies
- Induction heaters
- Machine-tool control
- Manufacturing and testing
- Medical equipment
- Metalworking machinery
- Motor testing
- Pumps
- Radiant heaters

## Specifications

Model Name	SS200K33	SS300K33	SS400K33	SS500K33	SS600K33	SS800K33	SS1000K33	SS1250K33	
<b>Topology</b>	Low Frequency / Induction								
<b>Power Factor</b>	0.98								
<b>Maximum Capacity</b>	200KVA	300KVA	400KVA	500KVA	600KVA	800KVA	1000KVA	1250KVA	
<b>AC INPUT</b>									
<b>Input Voltage</b>	3 $\phi$ 3w: 220, 380, 415, 440V; 3 $\phi$ 4w: 190 / 110, 200 / 115, 208 / 120, 230 / 133, 380 / 220, 400 / 231, 415 / 240, 440 / 254V								
<b>Input Frequency</b>	50 or 60Hz $\pm 5\%$								
<b>Phase</b>	3 $\phi$ 3w, 3 $\phi$ 4w								
<b>Input Voltage Range</b>	+15% ~ -15%; +10% ~ -20%.								
<b>Power Factor</b>	100%								
<b>AC OUTPUT</b>									
<b>Output Voltage</b>	3 $\phi$ 3w: 220, 380, 415, 440V; 3 $\phi$ 4w: 190 / 110, 200 / 115, 208 / 120, 230 / 133, 380 / 220, 400 / 231, 415 / 240, 440 / 254V								
<b>Output Frequency</b>	50 or 60Hz $\pm 5\%$								
<b>Phase</b>	3 $\phi$ 3w, 3 $\phi$ 4w								
<b>Output Regulation</b>	$\pm 2\%$ or better								
<b>Correction Rate</b>	$\pm 10\%$								
<b>Wave Distortion</b>	No wave form distortion								
<b>Harmonic Distortion</b>	None added to system								
<b>Efficiency</b>	98 % up at full load typical								
<b>Response</b>	100ms ~ 3 sec. (10% Overload, 1 hours; 25% Overload, 10 minutes; 50% Overload, 1 minute)								
<b>Load Power Factor</b>	0 lagging to 0 leading								
<b>Protection</b>	Manual control, Limit switch, Over / under voltage signal, Overheat signal, Pressure relief device, control source fuse								
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>									
<b>Front Panel</b>	Input / Output voltage meter, Output current meter, Oil valve gauge, Thermometer								
<b>Audible Alarms</b>	Less than 75 dBA at 2 m								
<b>ENVIRONMENTAL</b>									
<b>Operation Temperature</b>	10~40°C / 50~104°F								
<b>Operating Altitude</b>	1,000 meter without derating								
<b>Relative Humidity</b>	0~90%, non-condensing								
<b>Cooling</b>	Oil cooling								
<b>Heat Dissipation (Kcal)</b>	6820	10030	13640	17050	20460	27280	34100	42625	
<b>PHYSICAL</b>									
<b>Dimensions</b>	<b>Physical / Packing (In)</b>	55.11 $\times$ 44.09 $\times$ 67.96 / 61.02 $\times$ 49.99 $\times$ 75.98		62.99 $\times$ 55.11 $\times$ 66.92 / 68.89 $\times$ 61.02 $\times$ 77.95		62.99 $\times$ 57.08 $\times$ 78.74 / 68.89 $\times$ 62.99 $\times$ 89.76		70.86 $\times$ 62.99 $\times$ 78.74 / 76.77 $\times$ 68.89 $\times$ 89.76	
	<b>L<math>\times</math>W<math>\times</math>H (mm)</b>	1400 $\times$ 1120 $\times$ 1650 / 1550 $\times$ 1270 $\times$ 1930		1600 $\times$ 1400 $\times$ 1700 / 1750 $\times$ 1550 $\times$ 1980		1600 $\times$ 1450 $\times$ 2000 / 1750 $\times$ 1600 $\times$ 2280		1800 $\times$ 1600 $\times$ 2000 / 1950 $\times$ 1750 $\times$ 2280	
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	3300 / 3619		4620 / 5016		5940 / 6380		8800 / 9372	
	<b>(kg)</b>	1500 / 1645		2100 / 2280		2700 / 2900		4000 / 4260	

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# Stabilizer Series

## SS1500K33 / SS2000K33 / SS2500K33 / SS3000K33 / SS4000K33 / SS5000K33

### Specifications

Model Name	SS1500K33	SS2000K33	SS2500K33	SS3000K33	SS4000K33	SS5000K33	
<b>Topology</b>	Low Frequency / Induction						
<b>Power Factor</b>	0.98						
<b>Maximum Capacity</b>	1500KVA	2000KVA	2500KVA	3000KVA	4000KVA	5000KVA	
<b>AC INPUT</b>							
<b>Input Voltage</b>	3Ø3w: 220, 380, 415, 440V; 3Ø4w: 190 / 110, 200 / 115, 208 / 120, 230 / 133, 380 / 220, 400 / 231, 415 / 240, 440 / 254V						
<b>Input Frequency</b>	50 or 60Hz±5%						
<b>Phase</b>	3Ø3w, 3Ø4w						
<b>Input Voltage Range</b>	+15% ~ -15%, +10% ~ -20%.						
<b>Power Factor</b>	100%						
<b>AC OUTPUT</b>							
<b>Output Voltage</b>	3Ø3w: 220, 380, 415, 440V; 3Ø4w: 190 / 110, 200 / 115, 208 / 120, 230 / 133, 380 / 220, 400 / 231, 415 / 240, 440 / 254V						
<b>Output Frequency</b>	50 or 60Hz±5%						
<b>Phase</b>	3Ø3w, 3Ø4w						
<b>Output Regulation</b>	±2 % or better						
<b>Correction Rate</b>	±10 %						
<b>Wave Distortion</b>	No wave form distortion						
<b>Harmonic Distortion</b>	None added to system						
<b>Efficiency</b>	98 % high at full load (typical)						
<b>Response</b>	100ms ~ 3 sec. (10% Overload, 1 hours; 25% Overload, 10 minutes; 50% Overload, 1 minute)						
<b>Load Power Factor</b>	0 lagging to 0 leading						
<b>Protection</b>	Manual control, Limit switch, Over / under voltage signal, Overheat signal, Pressure relief device, control source fuse						
<b>ADVANCED WARNINGS / DIAGNOSTICS</b>							
<b>Front Panel</b>	Input / Output voltage meter, Output current meter, Oil valve gauge, Thermometer						
<b>Audible Alarms</b>	Less than 75 dBA at 2 m						
<b>ENVIRONMENTAL</b>							
<b>Operation Temperature</b>	10~40°C / 50~104°F						
<b>Operating Altitude</b>	1,000 meter without derating						
<b>Relative Humidity</b>	0~90%, non-condensing						
<b>Cooling</b>	Oil cooling						
<b>Heat Dissipation (Kcal)</b>	51150	68200	85250	102300	136400	170500	
<b>PHYSICAL</b>							
<b>Dimensions</b>	<b>Physical / Packing (in)</b>	74.8×66.92×78.74 / 80.7×72.83×87.76	90.55×78.74×80.7 / 96.45×84.64×90.55	90.55×78.74×88.58 / 96.45×84.64×99.6	94.48×82.67×88.58 / 100.39×88.58×99.6	102.36×90.55×90.55 / 108.26×96.45×101.57	110.23×98.42×90.55 / 116.14×104.33×101.57
	<b>L×W×H (mm)</b>	1900×1700×2000 / 2050×1850×2280	2300×2000×2050 / 2450×2150×2330	2300×2000×2250 / 2450×2150×2530	2400×2100×2250 / 2550×2250×2530	2600×2300×2300 / 2750×2450×2580	2800×2500×2300 / 2950×2650×2580
<b>Weight (Net / Gross)</b>	<b>(lbs)</b>	9900 / 10450	13200 / 13860	16720 / 17446	17600 / 18370	19800 / 20680	22000 / 22990
	<b>(kg)</b>	4500 / 4750	6000 / 6300	7600 / 7930	8000 / 8350	9000 / 9400	10000 / 10450

Specifications are subject to change without notice.

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