

- DC UPS
- Standby UPS
- Line Interactive UPS
- Online UPS
- Outdoor UPS
- AVR



In our world, everything is built to last.



VOLTRONIC POWER TECHNOLOGY CORP.

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UPS · INVERTER · CHARGER

Voltronic Power Overview

Voltronic Power Technology Corp. established by Alex Hsieh has over 20 years of experience in DMS (Design and Manufacturing Service) of power products. Headquartered in Taiwan, Voltronic Power is committed to providing high quality products and services to meet diverse customers' requirements. With the same diligent customer-oriented spirit, Voltronic Power is dedicated to continuously designing, manufacturing, marketing, and introducing a complete line of UPSs, inverters, and solar power products to the demanding power market.

To meet customers' demand, we have expanded our manufacturing factory to 3 for sufficient capacity of production. Our R&D center is co-located with manufacturing to offer efficient operation. We have solid and richly-experienced engineering teams dedicated to product development. Voltronic Power guarantees reliable product development and consistent manufacturing quality, from raw materials to finished products to punctually fulfill its delivery deadlines.

Voltronic Power is a truly remarkable company, with a strong history of service, innovation and growth. Voltronic Power's professional team is ready to start a new chapter in the global power market.

✿ Mission Statement & Corporate Vision



Production Line



SMD/AI



R&D

To become a worldwide leading DMS provider by developing both customized products and exclusive marketing intelligence for customers :

We focus 100% on creating customers' brands and dedicate ourselves to developing innovative power products and marketing intelligence for customers.

To develop a reputation in the power industry as a trusted and reliable partner :

We understand that "Good Products" are the core competence for company development. Therefore, we are dedicated to developing innovative and reliable products to customers through the continuous development and investment in our R&D center.

Build strong relationships with customers to strengthen customers' brands and market growth :

We help customers to develop their own brands and enlarge their market share because we strongly believe that customers are the key growth engine for Voltronic Power.

Continue developing the latest innovations, including eco-friendly and green products :

As global citizens, Voltronic Power is committed to reducing the environmental impact of our operations and products.

✿ Key Values to Customers

- **Secured Information Management:** With over 20 years of professional experience in the power market, we've managed power knowledge, market trends, and know-how with our customers. In the meanwhile, our customers' privacy has already been the most valued core for us to earn trusted relationships.
- **Innovative Design:** Leveraging 20 years of our professional experience in the power market, we've been highly aware of the market change and helped our customers attune to the dynamics of the industry. We've been dedicated to developing new technology and implementing innovative ideas in our products, but not always me-too outcome.
- **Quality Manufacturing:** Conforming with ISO-9001 and ISO-14001 certification, we have built up unmatched quality control systems from incoming components to finished products.
- **Satisfied Service:** We provide exclusive assistance and swift customer service, from product design and marketing packages to technical support.
- **Total Quality Assurance System:** From design, and manufacture, to service, we offer a Total Quality Assurance System to guarantee high-quality and reliable products and services. Our total quality system has been audited and approved by globally respected companies.

CFL UPS



- 40W DC UPS
- Equipped with one lamp holder for energy saving bulb
- 3 set of DC-powered outlets for energy saving bulb
- Off-mode charging
- Overload protection in battery mode and short circuit protection
- Three indicators available
- 3-step charging design to extend battery life

Devices:



CFL UPS Specification

MODEL	CFL UPS
CAPACITY	50VA/40 W
INPUT	
Nominal Voltage	230 VAC
Voltage Range	100 VAC - 300 VAC
OUTPUT	
Output Voltage (AC Mode)	100 VDC - 300 VDC
Output Voltage (Batt. Mode)	160-230 VDC $\pm$ 10%
Waveform (Batt. Mode)	DC Output
BATTERY & CHARGER	
Battery Type and Numbers	12V 7Ah x 1
Battery Voltage	12 VDC
Bulk charging voltage	14.5V $\pm$ 1.5%
Floating Voltage	13.7V $\pm$ 1.5%
Charging Current	1 A
Typical Recharge Time	6 hours recover to 90% capacity
INDICATORS	
Full battery at Line Mode	Green lighting
Charging battery at Line Mode	Green flashing every 2 seconds
Normal battery voltage at Battery Mode	Yellow lighting
Low battery at Battery Mode	Yellow flashing every second
Output short-circuited	Red lighting
Overload	Red flashing rapidly every 0.5 second
Overcharge	Red LED staying on for one second and off for 4 seconds
PHYSICAL	
Dimension, D x W x H (mm)	209 x 87 x 200
Net Weight (kgs)	2.7
ENVIRONMENT	
Humidity	0-90 % RH @ 0- 40°C (non-condensing)
Noise Level	Less than 40dB

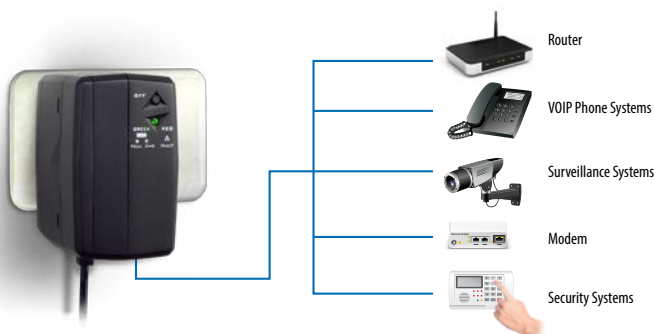
Product specifications are subject to change without further notice.

Backup Time Table:	
11W lighting bulb x 1	6 Hours
11W lighting bulb x 2	3 Hours
11W lighting bulb x 3	2 Hours
11W lighting bulb x 4	1.5 Hours

ePower DC UPS



- Built-in Li-ion battery
- Microprocessor controller guarantees high reliability
- Auto start when plugged in
- Manual power off switch
- Multi-color indicator
- Overload, short-circuit, over-charge and over-discharge protection



Backup Time Table : (For Reference)

12V/1A Router	150 mins
12V/1.5A Router	120 mins
12V/2.0A Router	90 mins

ePower DC UPS Specification

MODEL		ePower
AC INPUT		
Voltage Range	90 VAC ~ 264 VAC	
Frequency	50 or 60 Hz	
Surge protection	1.5KV (Optional K.21 enhanced, 6KV)	
DC OUTPUT		
Voltage	12VDC ± 5%	
Max. Power	25W (2.1A)	
BATTERY		
Type	Lithium-ion Battery	
Voltage	3.7VDC	
Capacity	2600mAh	
Typical Charging Time	3 hours recover to 90% capacity	
PROTECTION		
Battery	Deep Discharge, Over-charge and Short Circuit Protection	
Input/Output	Fuse for Short Circuit and Overload Protection	
INDICATORS		
LED	Full Battery	Green lighting
	Battery Charging	Constant flashing on Green LED
	Battery Discharging	Quick flashing on Green LED
	Fault	Red lighting
PHYSICAL		
Input Plug	Mounted on the housing (NEMA/EU/UK)	
Output Cable	1m Length (DC Male Jack, OD 4mm, ID 1.7mm)	
Dimension, D x W x H (mm)	68 x 42 x 74	
Net Weight (g)	280	

Product specifications are subject to change without further notice.

Nano

- 400VA/600VA/800VA standby UPS
- Compact size with stand and wall mounting flexibility
- Auto restart while AC is recovering
- Simulated sine wave output
- Cold start function
- Full protection: discharge, overcharge, short circuit, and thermal protection



Nano-APFC

- 400VA/600VA/800VA standby UPS
- High frequency design
- Suitable for active PFC equipped personal computers
- Auto restart while AC is recovering
- Simulated sine wave output
- Cold start function
- Optional USB communication port and RJ-11/RJ-45 protection



Scudo

- 400VA/600VA standby UPS
- Compact size with local receptacles for easy use
- Excellent microprocessor control guarantees high reliability
- Auto restart while AC is recovering
- Simulated sine wave output
- Cold start function
- Simple and easy installation & operation



Standby UPS Selection Guide

MODEL	Nano 400	Nano 600	Nano 800	Nano-APFC 400	Nano-APFC 600	Nano-APFC 800	Scudo 400	Scudo 600
CAPACITY	400 VA / 240 W	600 VA / 360 W	800 VA / 480 W	400 VA / 240 W	600 VA / 360 W	800 VA / 480 W	400 VA / 200 W	600 VA / 300 W
INPUT								
Voltage	110/120 VAC or 220/230/240 VAC						220/230/240 VAC	
Acceptable Voltage Range	90 - 145 VAC or 180 - 270 VAC						180 - 270 VAC	
Frequency	50Hz or 60Hz (Auto sensing)						50 Hz	
OUTPUT								
Output Voltage	110/120 VAC or 220/230/240 VAC						220/230/240 VAC	
Voltage Regulation (Batt. Mode)	± 10%						± 10%	
Frequency Range (Batt. Mode)	50Hz or 60Hz ± 1 Hz						50Hz ± 1 Hz	
Transfer Time (Typical)	2-6 ms							
Waveform (Batt. Mode)	Simulated Sinewave							
BATTERY								
Battery Type & Number	12 V / 4.5 Ah x 1	12 V / 7 Ah x 1	12 V / 9 Ah x 1	12 V / 4.5 Ah x 1	12 V / 7 Ah x 1	12 V / 9 Ah x 1	12 V / 4.5 Ah x 1	12 V / 5 Ah x 1
Typical Recharge Time	8 hours recover to 90% capacity							
INDICATORS								
AC Mode	Green lighting							
Battery Mode	Green flashing every 10 seconds							
Low Battery (Batt. Mode)	Green flashing every second and red lighting							
Fault	Red lighting							
ALARM								
Battery Mode	Sounding every 10 seconds							
Low Battery (Batt. Mode)	Sounding every second							
Fault	Continuously sounding							
PHYSICAL								
Dimension, D x W x H (mm)	228 x 82.5 x 207 (Vertically stand)						166 x 161 x 89.2	
Net Weight (kgs)	2.2	2.7	3.1	2.2	2.7	3.1	2.25	2.56
ENVIRONMENT								
Humidity	0-90 %							
Operating Temperature	0- 40°C (non-condensing)							
MANAGEMENT								
Smart USB (Option)	N/A			Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC			N/A	

Product specifications are subject to change without further notice.

AKA



- 350VA/400VA/550VA/600VA/750VA/800VA Standby UPS
- Compact size for stand and mounting flexibility
- Auto restart while AC is recovering
- Simulated sine wave output
- Cold start function
- Optional USB communication port
- Optional 5V USB charger
- Optional RJ11 and coax surge protection
- Optional LCD version is also available by request
- Bypass Surge Protection Outlets
- Easy Battery Replacement
- Optional HID Power Device USB port

AKA Standby UPS Selection Guide

MODEL	AKA 350	AKA 550	AKA 750	AKA 400	AKA 600	AKA 800
CAPACITY	350VA / 210W	550 VA / 330 W	750 VA / 450 W	400VA / 240W	600 VA / 360 W	800 VA / 480 W
INPUT						
Voltage	110/120 VAC			220/230/240 VAC		
Acceptable Voltage Range	90 - 145 VAC			180 - 270 VAC		
Frequency Range	60 Hz / 50 Hz (Auto sensing)					
OUTPUT						
Voltage	110/120 VAC			220/230/240 VAC		
AC Voltage Regulation (Batt. Mode)	±10%					
Frequency Range (Batt. Mode)	60 Hz or 50 Hz ±1 Hz					
Transfer Time	Typical 2-6 ms, Max. 10ms					
Waveform (Batt. Mode)	Simulated Sinewave					
BATTERY						
Battery Type & Number	12V/4Ah x 1	12 V/4.5Ah x 1	12 V/5Ah x 1	12 V/4Ah x 1	12 V/4.5Ah x 1	12 V/5Ah x 1
Typical Recharge Time	8 hours recover to 90% capacity					
INDICATORS						
AC Mode	Green lighting					
Battery Mode	Yellow flashing					
Fault	Red lighting					
ALARM						
Battery Mode	Sounding every 10 seconds					
Low Battery	Sounding every second					
Overload	Sounding every 0.5 second					
Fault	Continuously sounding					
PROTECTION						
Full Protection	Overload, discharge, and overcharge protection					
PHYSICAL						
Dimension, D x W x H (mm)	305 x 158.5 x 95					
Net Weight (kgs)	2.5	2.6	2.9	2.5	2.6	2.9
ENVIRONMENT						
Humidity	0-90 % RH @ 0- 40°C (Non-condensing)					
Noise Level	Less than 40dB					

Product specifications are subject to change without further notice.

Apex



- 400VA/600VA/800VA/1KVA/1.5KVA/2KVA line interactive UPS
- Touch screen LCD to display UPS information circularly (option)
- Compact size
- Boost and buck AVR for voltage stabilization
- Auto restart while AC is recovering
- Off-mode charging
- Cold start function
- Generator compatible (option)
- No load shutdown in battery mode for 800VA and below models.
- Optional HID Power Device USB port

Apex Line Interactive UPS Selection Guide

MODEL		Apex 400	Apex 600	Apex 800	Apex 1K	Apex 1.5K	Apex 2K
CAPACITY		400 VA / 240 W	600 VA / 360 W	800 VA / 480 W	1000 VA / 600 W	1500 VA / 900 W	2000 VA / 1200 W
INPUT							
Voltage		110/120 VAC or 220/230/240 VAC					
Voltage Range		81-145 VAC / 162-290 VAC					
Frequency Range		60/50 Hz (Auto sensing)					
OUTPUT							
Output Voltage		110/120 VAC or 220/230/240 VAC					
AC Voltage Regulation (Batt. Mode)		± 10%					
Frequency Range (Batt. Mode)		50 Hz or 60 Hz ± 1 Hz					
Transfer Time		Typical 2-6 ms					
Waveform (Batt. Mode)		Simulated Sinewave					
BATTERY							
Battery Type & Number		12 V/4.5 Ah x 1	12 V/7 Ah x 1	12 V/9 Ah x 1	12 V/7 Ah x 2	12 V/9 Ah x 2	12 V/9 Ah x 2
Typical Recharge Time		4 hours recover to 90% capacity			4-6 hours recover to 90% capacity		
PROTECTION							
Full Protection		Overload, discharge, and overcharge protection					
INDICATORS							
LCD Model		Input voltage, output voltage, battery capacity, load level and UPS status					
LED Model	AC Mode	Green lighting				Green lighting	
	Battery Mode	Green flashing				Yellow flashing	
	Fault	N/A				Red lighting	
ALARM							
Battery Mode		Sounding every 10 seconds					
Low Battery		Sounding every second					
Overload		Sounding every 0.5 second					
Fault		Continuously sounding					
PHYSICAL							
LED Model	Dimension, D x W x H (mm)	279 x 101 x 142			320 x 130 x 182		
	Net Weight (kgs)	3.55	4.2	4.9	8.2	10.4	10.6
LCD Model	Dimension, D x W x H (mm)	300 x 101 x 142			320 x 130 x 182		
	Net Weight (kgs)	3.7	4.4	5.0	8.2	10.4	10.6
ENVIRONMENT							
Humidity		0-90 % RH @ 0- 40°C (Non-condensing)					
Noise Level		Less than 40dB					

Product specifications are subject to change without further notice.

Library



- 600VA/1KVA/2KVA simulated sine wave output
- Boost and buck AVR for voltage stabilization
- Selectable charging current
- Auto restart while AC is recovering
- Off-mode charging
- Cold start function
- Built-in super charger supporting long backup with external battery
- Generator compatible (option)



Library Line Interactive UPS Selection Guide

MODEL	Library 600	Library 1K	Library 2K
CAPACITY	600 VA / 360 W	1000 VA / 600 W	2000 VA / 1200 W
INPUT			
Voltage	220/230 VAC		
Acceptable Voltage Range	140 - 300 VAC		
Frequency Range	50Hz		
OUTPUT			
AC Voltage Regulation (Batt. Mode)	220/230 ± 10%		
Frequency Range (Batt. Mode)	50 Hz ±1 Hz		
Transfer Time	Typical 4-8 ms		
Waveform (Batt. Mode)	Simulated Sinewave		
BATTERY			
Battery Voltage	12 VDC		24 VDC
Floating Charging Voltage	13.7 VDC ± 2%		27.4 VDC ± 2%
Maximum Charge Current	2.5A/6A/10A (Adjustable from manufacturer)	5A/10A/15A/20A (Adjustable from manufacturer)	
PROTECTION			
Full Protection	Overload, discharge, and overcharge protection		
INDICATORS			
Line Mode	Green lighting		
Battery Mode	Yellow flashing		
Fault	Red lighting		
ALARM			
Low Battery	Sounding every second		
Overload	Sounding every 0.5 second		
Battery Replacement Alarm	Sounding every 2 seconds		
Fault	Continuously sounding		
PHYSICAL			
Dimension, D x W x H (mm)	358.5 x 96.8 x 146.5	395 x 145 x 220	
Net Weight (kgs)	5.8	9.0	13.55
ENVIRONMENT			
Humidity	0 to 90% Relative Humidity (Non-condensing)		
Noise Level	Less than 40dB		

Product specifications are subject to change without further notice.

Prime



Prime 1200/1350/1500

Prime 550/700/850/1000

- 550VA/700VA/850VA/1000VA/1200VA/1350VA/1500VA simulated sine wave output
- Boost AVR for voltage stabilization
- Comprehensive LCD for real-time UPS status
- Provides battery backup and surge protected outputs
- Easy replacement battery compartment
- Optional hot-swappable battery design
- ENERGY STAR qualified for 120Vac models
- Built-in USB com. port and RJ-45 network protect
- Optional coax surge protection for TV antenna
- Optional 5V USB charger port for mobile devices
- Optional HID Power Device USB port

Line Interactive UPS

Prime Line Interactive UPS Selection Guide

MODEL	Prime 550	Prime 700	Prime 850	Prime 1000	Prime 1200	Prime 1350	Prime 1500
CAPACITY	550VA / 330W	700VA / 420W	850VA / 510W	1000VA / 600W	1200VA / 720W	1350VA / 810W	1500VA / 900W
INPUT							
Voltage	110/120 VAC or 220/230/240VAC						
Voltage Range	81-132VAC / 86-142VAC or 162-270VAC / 170-270VAC / 176-270VAC						
Frequency Range	50 Hz / 60 Hz ± 5Hz (Auto Sensing)						
OUTPUT							
Output Voltage	110/120 VAC or 220/230/240 VAC						
AC Voltage Regulation (Batt. Mode)	± 5%						
Frequency Range (Batt. Mode)	50 Hz / 60 Hz ± 1Hz						
Transfer Time	6ms typical, 10ms max						
Waveform (Batt. Mode)	Simulated Sinewave						
BATTERY							
Battery Type & Number	12 V/7Ah x 1	12 V/7 Ah x 1	12 V/9 Ah x 1	12 V/9 Ah x 1	12 V/9 Ah x 2	12 V/9 Ah x 2	12 V/9 Ah x 2
Typical Recharge Time	6-8 hours recover to 90% capacity						
PROTECTION							
Full Protection	Overload, discharge, and overcharge protection						
INDICATORS							
LCD Display	Input/output voltage, Input/output frequency, Load level in VA, Load level in watts, Battery capacity and Estimated remaining runtime (Site wiring fault indicator only available for 110/120VAC)						
ALARM							
Battery Mode	Sounding every 10 seconds						
Low Battery	Sounding every second						
Overload	Sounding every 0.5 second						
Fault	Continuously sounding						
PHYSICAL							
Dimension, D x W x H (mm)	288 x 99 x 280				410 x 99 x 280		
Net Weight (kgs)	6.6	7.6	7.6	8.8	11	11.6	12
ENVIRONMENT							
Humidity	0-90 % RH @ 0- 40°C (Non-condensing)						
Noise Level	Less than 40dB					Less than 45dB	
MANAGEMENT							
Optional USB Port	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC						
Compliance & Standards	110/120VAC model: cTUVus (standard:UL 1778), FCC Part 15 Class B, ENERGY STAR (USA) 220/230/240VAC model: CE (Class A)						

Product specifications are subject to change without further notice.

Evolution



- Compact size
- Boost and buck AVR for voltage stabilization
- Auto restart while AC is recovering
- Simulated sine wave output
- Off-mode charging
- Cold start function
- Generator compatible (option)
- Optional 5V USB charging port
- Compact size for stand and mounting flexibility

Evolution Line Interactive UPS Selection Guide

MODEL	Evolution 400	Evolution 600	Evolution 800
CAPACITY	400 VA / 240 W	600 VA / 360 W	800 VA / 480 W
INPUT			
Voltage	110/120 VAC or 220/230/240 VAC		
Voltage Range	81-145 VAC / 162-290 VAC		
Frequency Range	60/50 Hz (auto sensing)		
OUTPUT			
Voltage	110/120 VAC or 220/230/240 VAC		
AC Voltage Regulation (Batt. Mode)	±10%		
Frequency Range (Batt. Mode)	60 Hz or 50 Hz ±1 Hz		
Transfer Time	Typical 2-6 ms, 10 ms max.		
Waveform (Batt. Mode)	Simulated Sinewave		
BATTERY			
Battery Type & Number	12 V 4.5 Ah x 1	12 V/5 Ah x 1	12 V/5 Ah x 1
Typical Recharge Time	4-6 hours recover to 90% capacity		
PROTECTION			
Full Protection	Overload, discharge, and overcharge protection		
INDICATORS			
AC Mode	Green lighting		
Battery Mode	Green flashing		
ALARM			
Battery Mode	Sounding every 10 seconds		
Low Battery	Sounding every second		
Overload	Sounding every 0.5 second		
Fault	Continuously sounding		
PHYSICAL			
Dimension, D x W x H (mm)	245 x 163 x 90		
Net Weight (kgs)	3.5	4.0	4.5
ENVIRONMENT			
Humidity	0 to 90% Relative Humidity (Non-condensing)		
Noise Level	Less than 40dB		

Product specifications are subject to change without further notice.

Prosine

- 600VA/800VA line interactive sine wave UPS
- Digitalized PWM-based controller provides pure sinewave output
- Perfect power protection for mini servers & gaming PCs
- Boost and buck AVR for voltage stabilization
- Optional USB and RJ11/RJ45 protection
- Offering LED and LCD panels for selection
- Off-mode charging and cold start function



Imperial

- 750VA/1KVA/1.5KVA/2KVA line interactive sine wave UPS
- Digitalized PWM-based controller provides pure sinewave output
- Perfect power protection for servers, point-of-sale and workstations
- Boost and buck AVR for voltage stabilization
- Optional USB and RJ45 protection
- Off-mode charging and cold start function



Line Interactive sine wave UPS Selection Guide

MODEL	Prosine 600	Prosine 800	Imperial 750	Imperial 1K	Imperial 1.5K	Imperial 2K
CAPACITY	600 VA / 360 W	800 VA / 480 W	750 VA / 480 W	1000 VA / 700 W	1500 VA / 1050 W	2000 VA / 1400W
INPUT						
Voltage	110/120 VAC or 220/230/240 VAC					
Voltage Range	81-145 VAC / 162-290 VAC					
Frequency Range	60/50 Hz (Auto sensing)					
OUTPUT						
AC Voltage Regulation (Batt. Mode)	±10%					
Frequency Range (Batt. Mode)	50 Hz or 60 Hz ± 1 Hz					
Transfer Time	Typical 2-6 ms, 10ms max.					
Waveform (Batt. Mode)	Pure Sinewave					
BATTERY						
Battery Type & Number	12 V / 7Ah x 1	12 V / 9Ah x 1	12 V / 9 Ah x 1	12 V / 7Ah x 2	12 V / 9 Ah x 2	12 V / 10 Ah x 2
Typical Recharge Time	4 hours recover to 90% capacity		6 hours recover to 90% capacity			
PROTECTION						
Full Protection	Overload, discharge, and overcharge protection					
INDICATORS						
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, and Low Battery					
ALARM						
Battery Mode	Sounding every 10 seconds					
Low Battery	Sounding every second					
Overload	Sounding every 0.5 second					
Battery Replacement Alarm	Sounding every 2 seconds					
Fault	Continuously sounding					
PHYSICAL						
Dimension, D x W x H (mm)	328 x 100 x 145		350 x 146 x 160		397 x 146 x 205	
Net Weight (kgs)	5.2	6.0	6.8	9.0	12.2	13.7
ENVIRONMENT						
Humidity	0-90 % RH @ 0- 40°C (Non-condensing)					
Noise Level	Less than 40dB		Less than 45dB		Less than 55dB	
MANAGEMENT						
USB & RS-232 Ports	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC					

Product specifications are subject to change without further notice.

Atlas



- Pure sine wave output
- AVR for voltage stabilization
- Comprehensive LCD for real-time UPS status
- Provides battery backup and surge protected outlets
- Easy replacement battery compartment
- Optional hot-swappable battery design
- ENERGY STAR qualified for 120Vac models
- Built-in USB com. port and RJ-45 network surge protection
- Optional 5V USB charger port for mobile device
- Optional coax surge protection for TV antenna
- Off mode charging
- Cold Start function

Atlas line Interactive sine wave UPS Selection Guide

MODEL	Atlas 600		Atlas 800		Atlas 1000		Atlas 1200		Atlas 1500		
CAPACITY	600 VA / 360 W		800 VA / 480 W		1000 VA / 600 W		1200 VA / 720 W		1500 VA / 900 W		
INPUT											
Voltage	110/120 VAC or 220/230/240 VAC										
Voltage Range	81~134VAC/89~145VAC or 162~268VAC/170~280VAC/177~290VAC										
Frequency Range	50/60 Hz ± 5Hz(Auto sensing)										
OUTPUT											
Voltage	110/120 VAC or 220/230/240 VAC										
AC Voltage Regulation (Batt. Mode)	±10%										
Frequency Range (Batt. Mode)	60 Hz or 50 Hz ±1 Hz										
Transfer Time	6ms typical, 10ms max										
Waveform (Batt. Mode)	Pure Sinewave										
BATTERY											
Battery Type & Number	12 V/7 Ah x 1		12 V/9 Ah x 1		12 V/10 Ah x 1		12 V/7 Ah x 2		12 V/9 Ah x 2		
Typical Recharge Time	6-8 hours recover to 90% capacity										
PROTECTION											
Full Protection	Overload, discharge, and overcharge protection										
INDICATORS											
LCD Display	Input/output voltage, input/output frequency, load in VA/Watts, battery capacity, estimated remaining runtime, site wiring fault indications.										
ALARM											
Battery Mode	Sounding every 10 seconds										
Low Battery	Sounding every second										
Overload	Sounding every 0.5 second										
Fault	Continuously sounding										
PHYSICAL											
Dimension, D x W x H (mm)	288 x 99 x 280						410 x 99 x 280				
Net Weight (kgs)	8.3		8.4		8.5		11.3		13.1		
ENVIRONMENT											
Humidity	0-90 % RH @ 0- 40°C (Non-condensing)										
Noise Level	Less than 40dB						Less than 45dB				
MANAGEMENT											
Optional USB/RS-232 Port	Supports Windows® 2000/2003/XP/Vista/2008/7, Linux, Unix, and MAC										

Product specifications are subject to change without further notice

Otima II



- Pure sine wave
- User-friendly and easy-shift LCD display
- High flexibility with Rack/Tower design
- Output power factor 0.9
- Programmable power management outlets
- ECO (Efficiency Corrective Optimizer) operation for energy saving
- Boost and Buck AVR for voltage stabilization
- Hot-swappable battery design
- Multiple communications available
- Optional HID Power Device USB Port

Otima II Line Interactive sine wave UPS Selection Guide

MODEL	Otima II 800	Otima II 1.1K (L)	Otima II 1.5K	Otima II 2K (L)	Otima II 2.5K	Otima II 3K (L)	Otima II 5K (L)	
CAPACITY	800VA / 720W	1100VA / 990W or 1100VA / 1000W	1500VA / 1350W	2000VA / 1800W	2500VA / 2250W	3000VA / 2700W	5000VA / 4500W	
INPUT								
Voltage	110/115/120/127 VAC or 208/220/230/240 VAC						208/220/230/240 VAC	
Acceptable Voltage Range	81-152 VAC or 162-290 VAC						162-290 VAC	
Frequency Range	60/50 Hz (Auto sensing)							
OUTPUT								
Output Voltage	110/115/120/127 VAC or 208/220/230/240 VAC						208/220/230/240 VAC	
Voltage Regulation (Batt. Mode)	±1.5 % (Before battery alarm)							
Frequency Range (Batt. Mode)	50 Hz or 60 Hz ± 1 Hz							
Current Crest Ratio	3:1							
Harmonic Distortion	2% max @ 100% linear load, 5% max @ 100% non-linear load (before low battery alarm)							
Transfer Time	Typical 2-6 ms, 10ms max.							
Waveform (Batt. Mode)	Pure Sinewave							
EFFICIENCY								
ECO Mode	97%							
Buck & Boost Mode	95%							
Battery Mode	Up to 90%		Up to 91%		Up to 92%			
BATTERY								
Standard Model	Type & Number	12 V/7 Ah x 2	12 V/9 Ah x 2	12 V/7 Ah x 4	12 V/9 Ah x 4	12 V/7 Ah x 6	12 V/9 Ah x 6	12 V/10 Ah x 6
	Charging Current (max.)	1.5 A						
	Charging Voltage	27.4 VDC ± 1%		54.8 VDC ± 1%		82.1 VDC ± 1%		
	Typical Recharge Time	4 hours recover to 90% capacity						
Long-run Model	Charging Current (max.)	N/A	1A/2A/4A/6A/8A	N/A	1A/2A/4A/6A/8A	N/A	1A/2A/4A/6A/8A	
	Charging Voltage		27.4 VDC ± 1%	N/A	54.8 VDC ± 1%	N/A	82.1 VDC ± 1%	
PROTECTION								
Full Protection	Overload, discharge, and overcharge protection							
INDICATORS								
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault and Low Battery							
ALARM								
Battery Mode	Sounding every 10 seconds							
Low Battery	Sounding every 2 seconds							
Overload	Sounding every second							
Fault	Continuously sounding							
PHYSICAL								
Standard Model	Dimension,DxWxH(mm)	410 x 438 x 88		510 x 438 x 88		630 x 438 x 88		
	Net Weight (kgs)	12.9	13.4	19.5	21.5	27.7	29.3	40
Long-run Model	Dimension,DxWxH(mm)	N/A	410 x 438 x 88	N/A	410 x 438 x 88	N/A	110/115/120/127 VAC: 510 x 438 x 88 208/220/230/240 VAC: 410 x 438 x 88 630 x 438 x 88	
	Net Weight (kgs)		9		10.8		110/115/120/127 VAC: 13.9 208/220/230/240 VAC: 11.9 22	
ENVIRONMENT								
Humidity	0-90 % RH @ 0- 40°C (Non-condensing)							
Noise Level	Less than 45dB							
MANAGEMENT								
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC							
Optional SNMP	Power management from SNMP manager and web browser							

*Derate capacity to 80% of capacity when the output voltage is adjusted to 208VAC.
Product specifications are subject to change without further notice.

Otima II



- Pure sine wave
- Output power factor 0.9
- Programmable power management outlets
- ECO (Efficiency Corrective Optimizer) operation for energy saving
- Very high efficiency in battery mode
- Boost and Buck AVR for voltage stabilization
- Multiple communications available
- 3-stage smart battery charging control
- Optional HID Power Device USB Port

Otima II Line Interactive sine wave UPS Selection Guide

MODEL	Otima II T 800	Otima II T 1.1K (L)	Otima II T 1.5K	Otima II T 2K (L)	Otima II T 2.5K	Otima II T 3K (L)	Otima II T 5K (L)	
CAPACITY	800VA / 720W	1100VA / 990W	1500VA / 1350W	2000VA / 1800W	2500VA / 2250W	3000VA / 2700W	5000VA / 4500W	
INPUT								
Voltage	110/115/120/127 VAC or 208/220/230/240 VAC						208/220/230/240VAC	
Acceptable Voltage Range	81-152 VAC or 162-290 VAC						162-290 VAC	
Frequency Range	60/50 Hz (Auto sensing)							
OUTPUT								
Output Voltage	110/115/120/127 VAC or 208/220/230/240 VAC						208/220/230/240VAC	
Voltage Regulation (Batt. Mode)	±1.5 % (Before battery alarm)							
Frequency Range (Batt. Mode)	50 Hz or 60 Hz ± 1 Hz							
Current Crest Ratio	3:1							
Harmonic Distortion	2% max @ 100% linear load, 5% max @ 100% non-linear load (before low battery alarm)							
Transfer Time	Typical 2-6 ms, 10ms max.							
Waveform (Batt. Mode)	Pure Sinewave							
EFFICIENCY								
ECO Mode	97%							
Buck & Boost Mode	95%							
Battery Mode	≥ 88%, up to 90% @ nominal battery voltage				≥ 89%, up to 91% @ nominal battery voltage for 110/115/120/127 VAC ≥ 91%, up to 92% @ nominal battery voltage for 208/220/230/240 VAC		≥ 91%, up to 92% @ nominal battery voltage	
BATTERY								
Standard Model	Type & Number	12 V/7 Ah x 2	12 V/9 Ah x 2	12 V/7 Ah x 4	12 V/9 Ah x 4	12 V/7 Ah x 6	12 V/9 Ah x 6	12 V/10 Ah x 6
	Charging Current (max.)	1.5 A						
	Charging Voltage	27.4 VDC ± 1%		54.8 VDC ± 1%		82.1 VDC ± 1%		
	Typical Recharge Time	4 hours recover to 90% capacity						
Long-run Model	Charging Current (max.)	N/A	1A/2A/4A/6A/8A (setting via LCD)	N/A	1A/2A/4A/6A/8A (setting via LCD)	N/A	1A/2A/4A/6A/8A (setting via LCD)	
	Charging Voltage		27.4 VDC ± 1%		54.8 VDC ± 1%		82.1 VDC ± 1%	
PROTECTION								
Full Protection	Overload, discharge, and overcharge protection							
INDICATORS								
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault and Low Battery							
ALARM								
Battery Mode	Sounding every 10 seconds							
Low Battery	Sounding every 2 seconds							
Overload	Sounding every second							
Fault	Continuously sounding							
PHYSICAL								
Standard Model	Dimension,DxWxH(mm)	397 x 145 x 220		455 x 145 x 220		421 x 190 x 318		
	Net Weight (kgs)	11.7	12.1	17.2	19.7	27.7	29	34.5
Long-run Model	Dimension,DxWxH(mm)	N/A	397 x 145 x 220	N/A	455 x 145 x 220	N/A	421 x 190 x 318	421 x 190 x 318
	Net Weight (kgs)		7.6		10.2		14.5	18
ENVIRONMENT								
Humidity	0-90 % RH @ 0- 40°C (Non-condensing)							
Noise Level	Less than 45dB							
MANAGEMENT								
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC							
Optional SNMP	Power management from SNMP manager and web browser							

Product specifications are subject to change without further notice.

Compact (1U)



- True double-conversion
- Output power factor 0.8
- 1U compact size perfectly fits for data processing and transmission such as servers, networking and IP telephone services
- Input power factor correction
- Converter mode available via software setting
- ECO mode for energy saving
- Built-in serial communication port/Dry contact
- Emergency power off (EPO) function

Compact 1U Online UPS Selection Guide

MODEL		Compact 1U 1K	Compact 1U 1KL
CAPACITY		1000 VA / 800 W	1000 VA / 800 W
INPUT			
Voltage		110/120 VAC or 220/230/240 VAC	220/230/240 VAC
Acceptable Voltage Range		55-150 VAC or 110-300 VAC @ 50% load 80-150 VAC or 160-300 VAC @ 100% load	110-300 VAC @ 50% load 160-300 VAC @ 100% load
Frequency Range		40-70 Hz	
Power Factor		≥ 0.99 @ Nominal voltage (full load)	
OUTPUT			
Output Voltage		110/120 VAC or 220/230/240 VAC	220/230/240 VAC
Voltage Regulation		± 1%	
Frequency Range (Synchronized Range)		57 ~ 63 Hz or 47 ~ 53 Hz	
Frequency Range (Batt. Mode)		60 Hz or 50 Hz ± 0.3 Hz	
Current Crest Ratio		5:1 (110/120 VAC) 3:1 (220/230/240 VAC)	3:1
Harmonic Distortion		≤ 3 % THD (Linear Load) ≤ 5 % THD (Non-linear Load)	
Transfer Time	AC Mode to Battery Mode	0ms	
	Inverter to Bypass	4 ms (Typical)	
Waveform (Batt. Mode)		Pure Sinewave	
EFFICIENCY			
AC Mode		86%	
ECO Mode		92%	
Battery Mode		83%	
BATTERY			
Battery Type		Lithium-iron battery or Sealed Lead-acid battery	Lithium-iron battery or Sealed Lead-acid battery
Battery Voltage		24 VDC	48 VDC
Battery Spec & Numbers		6 V / 9 Ah x 4	Depending on external battery capacity
Typical Recharge Time		9 hours recover to 90% capacity	
Charging Current		1A	6A
INDICATORS			
LED		AC mode, Battery mode, and fault indicators	
ALARM			
Battery Mode		Sounding every 4 seconds	
Low Battery		Sounding every second	
Overload		Sounding twice every second	
Fault		Continuously sounding	
PHYSICAL			
Dimension, D x W x H (mm)		477 x 438 x 44	300 x 438 x 44
Net Weight (kgs)		12.6	6
ENVIRONMENT			
Humidity		20-90 % RH @ 0- 50°C (non-condensing)	20-90 % RH @ 0-55°C (non-condensing)
Noise Level		Less than 50dB @ 1 Meter	
MANAGEMENT			
USB or RS-232		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC	
Dry Contact (Option)		Signal for AC Power Normal, Battery OK and Fault Alarm	

Product specifications are subject to change without further notice.

Winner Pro



- True double-conversion
- Output power factor 0.8
- Wide input voltage (110 V – 300 V)
- Converter mode available
- ECO mode for energy saving (Only available for 1-3KVA)
- Generator compatible
- Adjustable battery number only available for 6K and up models
- Smart SNMP works well with either USB or RS-232 together
- Emergency power off function (EPO) only available for 6K/10K models
- Adjustable charging current via LCD or software (1A~6A) only available for 6K/10K models
- Optional 1KL-12V, 12A charger available. (Please check sales directly)
- Optional output factor 0.9 (Please check sales directly)

Winner Pro Online UPS Selection Guide

MODEL		Winner Pro 1K (L)		Winner Pro 2K (L)		Winner Pro 3K (L)		Winner Pro 6K (L)		Winner Pro 10K (L)	
PHASE		Single phase with ground									
CAPACITY *		1000 VA / 800 W		2000 VA / 1600 W		3000 VA / 2400 W		6000VA / 4800W		10000 VA / 8000 W	
INPUT											
Nominal Voltage		100/110/115/120/127VAC or 200/208/220/230/240VAC						208/220/230/240VAC			
Input Voltage Range		55-150 VAC or 110-300 VAC (Based on load at 50%) 85-140VAC or 160-280VAC (Based on load at 100%)						110-300 VAC (Based on load at 50%) 176-300 VAC (Based on load at 100%)			
Frequency Range		40 Hz ~ 70 Hz						46~54 Hz or 56~64 Hz			
Power Factor		≥ 0.99 @ Nominal Voltage (100% load)									
OUTPUT											
Output Voltage		100/110/115/120/127VAC or 200/208/220/230/240VAC						208/220/230/240VAC			
Voltage Regulation		± 1 %									
Frequency Range (Synchronized Range)		47~ 53 Hz or 57 ~ 63 Hz						46~54 Hz or 56~64 Hz			
Frequency Range (Batt. Mode)		50 Hz ± 0.25 Hz or 60Hz ± 0.3 Hz						50 Hz or 60Hz ± 0.1 Hz			
Current Crest Ratio		3:1									
Harmonic Distortion		≤ 3 % THD (Linear Load) ≤ 6 % THD (Non-linear Load)						≤ 3 % THD (Linear Load) ≤ 5 % THD (Non-linear Load)			
Transfer Time	AC Mode to Battery Mode	Zero									
	Inverter to Bypass	4 ms (Typical)						Zero			
Waveform (Batt. Mode)		Pure Sinewave									
EFFICIENCY											
AC Mode		88%		89%		90%		92%		93%	
Battery Mode		83%		87%		88%		90%		91%	
BATTERY											
Standard Model	Battery Type	12 V / 9 Ah		12 V / 9 Ah		12 V / 9 Ah		12 V / 9 Ah			
	Numbers	2		4		6		16	20	16	20
	Typical Recharge Time	4 hours recover to 90% capacity						9 hours recover to 90% capacity			
	Charging Current (max.)	1 A						1 A / 2 A			
Long-run Model **	Charging Voltage	27.4VDC ± 1%		54.7 VDC ±1%		82.1 VDC ±1%		218.4 VDC±1%	273VDC ±1%	218.4 VDC±1%	273VDC ±1%
	Battery Type	Depending on the capacity of external batteries									
	Numbers	2	3	4	6	8	6	8	16 ~ 20 (Adjustable)		
	Charging Current (max.)	1A/2A/4A/6A (Adjustable)						1A/2A/4A/6A (Adjustable, 6A is only available for 16pcs batteries)			
	Charging Voltage	27.4VDC±1%	41.0VDC ± 1%	54.7VDC ±1%	82.1 VDC ±1%	109.4VDC ±1%	82.1 VDC ±1%	109.4VDC ±1%	273 VDC ±1% (Based on 20pcs batteries)		
INDICATORS											
LCD		Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators									
ALARM											
Battery Mode		Sounding every 4 seconds									
Low Battery		Sounding every second									
Overload		Sounding twice every second									
Fault		Continuously sounding									
PHYSICAL											
Standard Model	Dimension, D x W x H (mm)	282 x 145 x 220		397 x 145 x 220		421 x 190 x 318		369 x 190 x 688		442 x 190 x 688	
	Net Weight (kgs)	9.8		17		27.6		61	74	66	76
Long-run Model **	Dimension, D x W x H (mm)	282 x 145 x 220		397 x 145 x 220				369 x 190 x 318		442 x 190 x 318	
	Net Weight (kgs)	4.1		6.8		7.4		12		16	
ENVIRONMENT											
Humidity		20-90 % RH @ 0- 40°C (Non-condensing)						0-95% RH @ 0-50°C (non-condensing)		0-95% RH @ 0-40°C (non-condensing)	
Noise Level		Less than 50dB @ 1 Meter						Less than 55dB @ 1 Meter		Less than 58dB @ 1 Meter	
MANAGEMENT											
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC									
Optional SNMP		Power management from SNMP manager and web browser									

*1-3KVA: Derate to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100/200/208VAC.

6-10KVA: Derate to 60% of capacity in Frequency converter mode and to 90% when the output voltage is adjusted to 208VAC.

**Long-run model is only available for 200/208/220/230/240VAC systems (200VAC system only available for 1-3KVA).

Product specifications are subject to change without further notice.

Winner Pro Rack



- True double-conversion
- Input power factor correction
- Output power factor 0.8
- Wide input voltage range (110-300 VAC)
- Converter mode available
- ECO mode for energy saving only available for 1-3KVA models
- Generator compatible
- Adjustable charging current via LCD or software (1A~6A) only available for 6K/10K models
- Emergency power off function (EPO) only available for 6K/10K models
- Optional output factor 0.9 (Please check sales directly)
- Rack-Tower 2-in-1 for 6Kva and below models
- Hot-swappable battery design for 6Kva and below models

Winner Pro Rack Online UPS Selection Guide

MODEL		Winner Pro 1KR (L)		Winner Pro 2KR (L)		Winner Pro 3KR (L)		Winner Pro 6KR (L)		Winner Pro 10KR (L)	
PHASE		Single phase with ground									
CAPACITY		1000 VA / 800 W		2000 VA / 1600 W		3000 VA / 2400 W		6000 VA / 4800 W		10000 VA / 8000 W	
INPUT											
Nominal Voltage		100/110/115/120/127VAC or 200/208/220/230/240VAC						208/220/230/240VAC			
Input Voltage Range		55-145 VAC or 110-300 VAC at 50% load 85-140 VAC or 160-280 VAC at 100% load						110-300 VAC ± 3% at 50% Load 176-300 VAC ± 3% at 100% Load			
Frequency Range		40Hz ~ 70 Hz						46Hz ~ 54 Hz or 56Hz ~ 64 Hz			
Power Factor		≥ 0.99 @ Nominal Voltage (100% load)									
OUTPUT											
Output Voltage		100/110/115/120/127VAC or 200/208/220/230/240VAC						208/220/230/240VAC			
Voltage Regulation		± 1%						± 1%			
Frequency Range (Synchronized Range)		47~ 53 Hz or 57 ~ 63 Hz						46Hz ~ 54 Hz or 56Hz ~ 64 Hz			
Frequency Range (Batt. Mode)		50 Hz ± 0.25 Hz or 60Hz ± 0.3 Hz						50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz			
Current Crest Ratio		3:1									
Harmonic Distortion		≤ 3 % THD (Linear Load), ≤ 6 % THD (Non-linear Load)						≤ 3 % THD (Linear Load), ≤ 5 % THD (Non-linear Load)			
Transfer Time	AC Mode to Battery Mode	Zero						0 ms			
	Inverter to Bypass	4 ms (Typical)						0 ms			
Waveform (Batt. Mode)		Pure Sinewave									
EFFICIENCY											
AC Mode		88%		89%		90%		92%		93%	
Battery Mode		83%		87%		88%		90%		91%	
BATTERY											
Standard Model	Battery Type	12 V / 9 AH		12 V / 9 AH		12 V / 9 AH		12 V / 9 AH			
	Numbers	2		4		6		16		20	
	Typical Recharge Time	4 hours recover to 90% capacity						9 hours recover to 90% capacity			
	Charging Current	1.0 A						1A/2A (Adjustable)			
Long-run Model	Charging Voltage	27.4VDC ± 1%		54.7 VDC ±1%		82.1 VDC ±1%		218.4VDC ± 1%		273 VDC ± 1%	
	Battery Type	Depending on the capacity of external batteries						Depending on applications			
	Numbers	2	3	4	6	8	6	8	16 - 20 pcs (Adjustable)		
	Charging Current (max.)	1.0A/2.0A/4.0A/6.0 A						1A/2A/4A/6A (Adjustable, 6A is only available for 16pcs batteries)			
Long-run Model	Charging Voltage	27.4VDC ± 1%	41.0VDC ± 1%	54.7 VDC ±1%	82.1 VDC ±1%	109.4VDC ±1%	82.1 VDC ±1%	109.4VDC ±1%	218.4 VDC ± 1% (Based on 16pcs batteries)		
INDICATORS											
LCD Panel		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions									
ALARM											
Battery Mode		Sounding every 4 seconds									
Low Battery		Sounding every second									
Overload		Sounding twice every second									
Fault		Continuously sounding									
PHYSICAL											
Standard Model	Dimension, D x W x H (mm)	310 x 438 x 88 [2U]		410 x 438 x 88 [2U]		630 x 438 x 88 [2U]		UPS Unit: 530x438x88 [2U] Battery Pack: 668x438x88 [2U]	UPS Unit: 530x438x88 [2U] Battery Pack: 580x438x133 [3U]	UPS Unit: 580x438x133[3U] Battery Pack: 580x438x133 [3U]	
	Net Weight (kgs)	12		19		29.3		UPS Unit: 15 Battery Pack: 48	UPS Unit: 15 Battery Pack: 61	UPS Unit: 18 Battery Pack: 51	UPS Unit: 18 Battery Pack: 61
Long-run Model*	Dimension,D x W x H (mm)	310 x 438 x 88 [2U]		410 x 438 x 88 [2U]				530 x 438 x 88 [2U]		580 x 438 x 133[3U]	
	Net Weight (kgs)	9		12		14.2		15		18	
ENVIRONMENT											
Humidity		20-90 % RH @ 0- 40°C (non-condensing)						0-95 % RH @ 0- 40°C (non-condensing)			
Noise Level		Less than 50dB @ 1 Meter						Less than 55dB @ 1 Meter		Less than 58dB @ 1 Meter	
MANAGEMENT											
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC									
Optional SNMP		Power management from SNMP manager and web browser									

*Long-run model is only available for 200/208/220/230/240VAC systems.

**Derate to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100/200/208VAC.
Product specifications are subject to change without further notice.

Galleon II 1KVA/1.5KVA/2KVA/3KVA



Galleon II 2K/3K

Galleon II 1K/1.5K

- True double-conversion online UPS
- Input power factor correction 0.99
- Output power factor 0.9
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- ECO mode operation for energy saving
- Very high surge immunity up to 7KV, 13KA, 1300J
- Generator compatible
- High overload capability and enhanced short circuit protection
- SNMP/USB/RS-232 multiple communications
- 3-stage smart charging design
- Maximum 8A extended parallel control available for long run model
- Optional HID Power Device USB Port
- Laser printer and ultrasound system load acceptable

Galleon II Online UPS Selection Guide

MODEL		Galleon II 1K (L)	Galleon II 1.5K (L)		Galleon II 2K (L)		Galleon II 3K (L)		
PHASE		Single phase with ground							
CAPACITY		1000 VA / 900 W		1500 VA / 1350 W		2000 VA / 1800 W		3000 VA / 2700 W	
INPUT									
Nominal Voltage		100/110/115/120/127 VAC or 200/208/220/230/240 VAC							
Voltage Range		55 - 150 VAC ± 5 % or 110 - 300 VAC ± 5 % at 50% load 80 - 150 VAC ± 5 % or 160 - 300 VAC ± 5 % at 100% load							
Frequency Range		40 Hz ~ 70 Hz							
Power Factor		≥ 0.99 @ Nominal Voltage (100% Load)							
THDi		≤ 5% @ 100~130VAC or 205-245VAC THDU < 1.6% @ input and full linear load condition with battery fully charged							
OUTPUT									
Output Voltage		100/110/115/120/127 VAC or 200/208/220/230/240 VAC							
AC Voltage Regulation (Batt. Mode)		± 1%							
Frequency Range (Synchronized Range)		47~53 Hz or 57~63 Hz							
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz							
Current Crest Ratio		3:1							
Harmonic Distortion		≤ 2 % THD (Linear Load) ; ≤ 4 % THD (Non-linear Load)							
Transfer Time	AC Mode to Batt. Mode	Zero							
	Inverter to Bypass	4 ms (Typical)							
Waveform (Batt. Mode)		Pure Sinewave							
EFFICIENCY									
AC Mode		90%				91%			
ECO Mode		97%							
Battery Mode		89%		89%		89%		90%	
BATTERY									
Standard Model	Battery Type	12 V / 7 Ah		12 V / 9 Ah		12 V / 7 Ah		12 V / 9 Ah	12 V / 7 Ah
	Numbers	3		3		6		6	8
	Typical Recharge Time	4 hours recover to 90% capacity							
	Charging Current (max.)	1.5 A							1.2 A
Long-run Model	Charging Voltage	41.0 VDC ± 1%				82.1 VDC ±1%		109.6 VDC ± 1%	
	Battery Type	Depending on the capacity of external batteries							
	Numbers	3		3		6		6	8
	Charging Current (max.)	1A/2A/4A/6A/8A (Selectable)							1A/2A/4A/6A/7A (Selectable)
	Charging Voltage	41.0 VDC ± 1%				82.1 VDC ±1%		109.6 VDC ± 1%	
INDICATORS									
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions							
ALARM									
Battery Mode		Sounding every 5 seconds							
Low Battery		Sounding every 2 seconds							
Overload		Sounding every second							
Fault		Continuously sounding							
PHYSICAL									
Standard Model	Dimension, DxWxH (mm)	397 x 145 x 220				421 x 190 x 318			
	Net Weight (kgs)	12		13.8		22.5		26.6	32.2
Long-run Model	Dimension, DxWxH (mm)	397 x 145 x 220				421 x 190 x 318			
	Net Weight (kgs)	6.3		6.5		10.5		11.7	11.7
ENVIRONMENT									
Humidity		20-95 % RH @ 0- 40°C (Non-condensing)							
Noise Level		Less than 50dB @1Meter							
MANAGEMENT									
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC							
Optional SNMP		Power management from SNMP manager and web browser							

*Derate capacity to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100VAC, 200VAC or 208VAC.
Product specifications are subject to change without further notice.

Galleon II Rackmount/Rack Tower 1KVA/1.5KVA/2KVA/3KVA



- True double-conversion
- Output power factor 0.9
- ECO and advanced ECO mode for energy saving
- Output voltage regulation < 1%
- Higher output crest ratio 3:1
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- Hot swappable battery design
- Optional HID Power Device USB Port

Galleon II Rackmount/Rack Tower Online UPS Selection Guide

MODEL		Galleon II RM 1K (L)		Galleon II RM 1.5K (L)		Galleon II RM 2K (L)		Galleon II RM 3K (L)	
PHASE		Single phase with ground							
CAPACITY*		1000 VA / 900 W		1500 VA / 1350 W		2000 VA / 1800 W		3000 VA / 2700 W	
INPUT									
Nominal Voltage		100*/110*/115*/120 /127 VAC or 200/208/220/230/240 VAC							
Voltage Range		55-150 VAC ± 5% or 110-300 VAC ± 5% @ 50% load 80-150 VAC ± 5% or 160-300 VAC ± 5% @ 100% load							
Frequency Range		40 Hz ~ 70 Hz							
Power Factor		≥ 0.99 @ nominal voltage (100% load)							
THDi		≤ 5% @ nominal input voltage							
OUTPUT									
Output Voltage		100*/110*/115*/120/127 VAC or 200/208/220/230/240 VAC							
AC Voltage Regulation (Batt. Mode)		± 1%							
Frequency Range (Synchronized Range)		57 ~ 63 Hz or 47 ~ 53 Hz							
Frequency Range (Batt. Mode)		60Hz ± 0.1Hz or 50 Hz ± 0.1Hz							
Current Crest Ratio		3:1 (max.)							
Harmonic Distortion		≤ 2 % THD (Linear Load) ; ≤ 4 % THD (Non-linear Load)							
Transfer Time	AC Mode to Batt. Mode	Zero							
	Inverter to Bypass	4 ms (Typical)							
Waveform (Batt. Mode)		Pure Sinewave							
EFFICIENCY									
AC Mode		90%		90%		91%		91%	
ECO Mode		97%		97%		97%		97%	
Battery Mode		88%	89%	89%		88%	89%	90%	
BATTERY									
Standard Model	Battery Type	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah		
	Numbers	2	3	3		4	6	6	
	Typical Recharge Time	4 hours recover to 90% capacity							
	Charging Current (max.)	1.5 A**							
Long-run Model	Charging Voltage	27.4 VDC ± 1%	41.1 VDC ± 1%	41.1 VDC ± 1%		54.8 VDC ±1%	82.1 VDC ±1%	82.1 VDC ±1%	
	Battery Type	Depending on the capacity of external batteries							
	Numbers	2	3	3		4	6	6	
	Charging Current (max.)	1A/2A/4A/8A (Selectable via LCD setting)							
	Charging Voltage	27.4 VDC ± 1%	41.1 VDC ± 1%	41.1 VDC ± 1%		54.8 VDC ±1%	82.1 VDC ±1%	82.1 VDC ±1%	
INDICATORS									
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions							
ALARM									
Battery Mode		Sounding every 5 seconds							
Low Battery		Sounding every 2 seconds							
Overload		Sounding every second							
Fault		Continuously sounding							
PHYSICAL									
Standard Model	Dimension,DxWxH (mm)	410 x 438 x 88		410 x 438 x 88		510 x 438 x 88	630 x 438 x 88	630 x 438 x 88	
	Net Weight (kgs)	11.6	14.2	14.5		19.5	26.9	27.4	
Long-run Model	Dimension,DxWxH (mm)	410 x 438 x 88		410 x 438 x 88		410 x 438 x 88		510 x 438 x 88	
	Net Weight (kgs)	6.4		6.5		6.5		10.5	
ENVIRONMENT									
Humidity		20-90 % RH @ 0- 40°C (non-condensing)							
Noise Level		Less than 50dB @ 1 Meter							
MANAGEMENT									
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC							
Optional SNMP		Power management from SNMP manager and web browser							

*Derate capacity to 95% when the output voltage is adjusted to 115VAC, derate capacity to 90% when the output voltage is adjusted to 110VAC and derate capacity to 80% when the output voltage is adjusted to 100VAC/200VAC/208VAC.

**If standard UPS is equipped with additional charger, the available setting options become 2A, 3A and 4A.

Product specifications are subject to change without further notice.

Galleon One 1KVA/1.5KVA/2KVA/3KVA



Galleon One 2K
Galleon One 3K

Galleon One 1K
Galleon One 1.5K

- True double-conversion
- Output power factor 1
- Input power factor correction
- 50/60Hz Frequency Converter Mode
- ECO mode energy saving
- Emergency power off (EPO) function
- Provides over voltage cut-off protection and surge immunity by MOV for full time equipment protection
- High power factor charger up to 8A/12A capacity with very low ripple current when charging battery
- Low input THDi to reduce power system pollution
- Adjustable charging current via LCD panel
- Smart battery charger design to optimize battery performance
- Generator compatible
- Optional HID Power Device USB Port

Galleon One 1KVA/1.5KVA/2KVA/3KVA Online UPS Selection Guide

MODEL		Galleon One 1K		Galleon One 1.5K		Galleon One 2K		Galleon One 3K	
PHASE		Single phase with ground							
CAPACITY*		1000 VA / 1000 W		1500 VA / 1500W		2000 VA / 2000 W		3000 VA / 3000 W	
INPUT									
Nominal Voltage		100/110/115/120 /127 VAC or 200/208/220/230/240 VAC							
Voltage Range		55 - 150 VAC ± 3 % or 110 - 300 VAC ± 3 % at 50% load 80 - 150 VAC ± 3 % or 160 - 300 VAC ± 3 % at 100% load							
Frequency Range		40Hz ~ 70Hz							
Power Factor		≥ 0.99 @ nominal voltage (100% load)							
THDI%		≤ 5%							
OUTPUT									
Output Voltage		100*/110*/115*/120 /127 VAC or 200*/208*/220/230/240 VAC							
AC Voltage Regulation (Batt. Mode)		± 1%							
Frequency Range (Synchronized Range)		47 ~ 53 Hz or 57~63Hz							
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz							
Current Crest Ratio		3:1							
Harmonic Distortion		≤ 2% THD (Linear Load), ≤ 4 % THD (Non-linear Load)							
Transfer Time	AC to DC	Zero							
	Inverter to Bypass	4 ms (Typical)							
	ECO to Battery Mode	8 ms (Typical), 10 ms (max)							
Waveform (Batt. Mode)		Pure Sinewave							
EFFICIENCY									
Line Mode		≥ 89% @ battery fully charged				≥ 91% @ battery fully charged			
ECO Mode		≥ 96% @ battery fully charged							
Battery Mode		≥ 88%				≥ 90%			
BATTERY									
Battery Type		12 V / 9 AH	12 V / 7 AH	12 V / 9 AH		12 V / 9 AH	12 V / 7 AH	12 V / 9AH	12 V / 7AH
Numbers		2	3	3		4	6	6	8
Typical Recharge Time		3 hours recover to 95% capacity for internal battery@ 2A charging current							
Charging Current		100/110/115/120 /127 VAC models: default 2A, max. 8A adjustable 200/208/220/230/240 VAC models: default 2A, max. 12A adjustable					Default: 2A, Max: 8A adjustable		
Charging Voltage		27.4VDC ± 1%	41.1VDC ± 1%	41.1VDC ± 1%		54.8VDC ± 1%	82.2VDC ± 1%	82.2VDC ± 1%	109.6 VDC ± 1%
INDICATORS									
LCD Panel		Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator							
ALARM									
Battery Mode		Sounding every 5 seconds							
Low Battery		Sounding every 2 seconds							
Overload		Sounding every second							
Fault		Continuously sounding							
PHYSICAL									
Dimension, D x W x H (mm)		397 x 145 x 220				421 x 190 x 318			
Net Weight (without battery) (kgs)		6.6	6.6	7		9.9	9.9	12.3	12.3
Net Weight (w/ built-in battery) (kgs)		11.7	13	14.6		20.3	23.2	28	33
ENVIRONMENT									
Humidity		20-95 % RH @ 0- 40°C (non-condensing)							
Noise Level		Less than 50dBA @ 1 Meter with Fan speed control							
MANAGEMENT									
Smart RS-232 or USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC							
Optional SNMP		Power management from SNMP manager and web browser							
STANDARD									
EMC/Safety		EMC EN62040-2 C2 for CE models							

*Derate capacity to 80% when the output voltage is adjusted to 100VAC/200VAC/208VAC.
Product specifications are subject to change without further notice.

Galleon One RT 1KVA/1.5KVA/2KVA/3KVA



- True double-conversion
- Output power factor 1
- Output voltage regulation < 1%
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Hot swappable battery design
- ECO mode energy saving
- Provides over voltage cutt-off protection and surge immunity by MOV for full time equipment protection
- High power factor charger upto 8A/12A capacity with very low ripple current when charging battery
- Low input THDi to reduce power system pollution
- Adjustable charging current via LCD panel
- Optional HID Power Device USB Port

Galleon One 1KVA/1.5KVA/2KVA/3KVA Rack/Tower Online UPS Selection Guide

MODEL		Galleon One RT 1K		Galleon One RT 1.5K		Galleon One RT 2K		Galleon One RT 3K	
PHASE		Single phase with ground							
CAPACITY*		1000 VA / 1000 W		1500 VA / 1500 W		2000 VA / 2000 W		3000 VA / 3000 W	
INPUT									
Nominal Voltage		100/110/115/120/127 VAC or 200/208/220/230/240 VAC							
Voltage Range		55-150 VAC ± 5% or 110-300 VAC ± 5% @ 50% load 80-150 VAC ± 5% or 160-300 VAC ± 5% @ 100% load							
Frequency Range		40 Hz ~ 70 Hz							
Power Factor		≥ 0.99 @ nominal voltage (100% load)							
Harmonic Distortion(THDi)		≤ 5% @ nominal input voltage							
OUTPUT									
Output Voltage		100*/110*/115*/120/127 VAC or 200*/208*/220/230/240 VAC							
AC Voltage Regulation (Batt. Mode)		± 1%							
Frequency Range (Synchronized Range)		57 ~ 63 Hz or 47 ~ 53 Hz							
Frequency Range (Batt. Mode)		60Hz ± 0.1Hz or 50 Hz ± 0.1Hz							
Current Crest Ratio		3:1 (max.)							
Harmonic Distortion		≤ 2 % THD (Linear Load) ; ≤ 4 % THD (Non-linear Load)							
Transfer Time	AC Mode to Batt. Mode	Zero							
	Inverter to Bypass	4 ms (Typical)							
Waveform (Batt. Mode)		Pure Sinewave							
EFFICIENCY									
AC Mode		≥ 89% @ full charged battery				≥ 91% @ full charged battery			
ECO Mode		≥ 96% @ full charged battery							
Battery Mode		≥ 88%				≥ 90%			
BATTERY									
Battery Type		12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah		
Numbers		2	3	3	4	6	6		
Typical Recharge Time		3 hours recover to 95% capacity for internal battery@ 2A charging current							
Charging Current		100/110/115/120 /127 VAC models: default 2A, max. 8A adjustable 200/208/220/230/240 VAC models: default 2A, max. 12A adjustable					Default: 2A, Max: 8A adjustable		
Charging Voltage		27.4 VDC ± 1%	41.1 VDC ± 1%	41.1 VDC ± 1%	54.8 VDC ±1%	82.1 VDC ±1%	82.1 VDC ±1%		
INDICATORS									
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions							
ALARM									
Battery Mode		Sounding every 5 seconds							
Low Battery		Sounding every 2 seconds							
Overload		Sounding every second							
Fault		Continuously sounding							
PHYSICAL									
Dimension, D x W x H (mm)		410 x 438 x 88		410 x 438 x 88		510 x 438 x 88	630 x 438 x 88	630 x 438 x 88	
Net Weight (without battery) (kgs)		6.6	7.8	8.1		9.4	10.6	12.4	
Net Weight (w/built-in battery) (kgs)		11.6	14.1	15.5		19.5	23.3	27.5	
ENVIRONMENT									
Humidity		20-90 % RH @ 0- 40°C (non-condensing)							
Noise Level		Less than 50dB @ 1 Meter							
MANAGEMENT									
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC							
Optional SNMP		Power management from SNMP manager and web browser							
STANDARD									
EMC/safetv		EMC EN62040-2 C2 for CE models							

*Derate capacity to 80% when the output voltage is adjusted to 100VAC/200VAC/208VAC.
Product specifications are subject to change without further notice

Galleon One 6KVA/10KVA



Galleon One 6K/10K (Attachable & Expandable battery bank) Galleon One 6KL/10KL

- True double-conversion
- DSP technology guarantees high performance
- Output power factor 1
- High efficiency up to 94%
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- Generator compatible
- SNMP/USB/RS-232 communications
- Adjustable battery numbers
- Optional N+X parallel redundancy
- Adjustable charging current via LCD panel
- Supporting Hot Standby function

Galleon One Online UPS Selection Guide

MODEL		Galleon One 6K(L)	Galleon One 10K(L)
PHASE		1 phase in / 1 phase out	
CAPACITY		6000 VA / 6000 W	10000 VA / 10000 W
INPUT			
Nominal Voltage		208/220/230/240 VAC	
Voltage Range		110~300VAC ± 3 % at 50% load ; 176~300VAC ± 3 % at 100% load	
Frequency Range		46~54 Hz or 56~64 Hz	
Phase		Single phase with ground	
Power Factor		≥ 0.99 @ full load	
THDi		< 4% @100% Load ; < 6% @50% Load	
OUTPUT			
Output Voltage		208/220/230/240 VAC	
AC Voltage Regulation (Batt. Mode)		± 1%	
Frequency Range (Synchronized Range)		46~54 Hz or 56~64 Hz	
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz	
Current Crest Ratio		3:1 (max.)	
Harmonic Distortion		≤ 1 % THD (Linear Load) ; ≤ 4 % THD (Non-linear Load)	
Transfer Time	AC Mode to Batt. Mode	Zero	
	Inverter to Bypass	Zero	
Waveform (Batt. Mode)		Pure Sinewave	
Overload	AC Mode	100%~110% 10min ; 110%~130%: 1min ; >130% : 1sec	
	Battery Mode	100%~110%: 30sec ; 110%~130%: 10sec ; >130% : 1sec	
EFFICIENCY			
AC Mode		94%	
Battery Mode		91%	
BATTERY			
Standard Model	Battery Type	12 V / 7 Ah	12 V / 9 Ah
	Numbers	16	
	Typical Recharge Time	9 hours recover to 90% capacity	
	Charging Current (max.)	1.0 A	
	Charging Voltage	218.4 VDC ± 1%	
Long-run Model	Battery Type	Depending on applications	
	Numbers	16-20**	
	Charging Current (max.)	4.0 A	
	Charging Voltage	(13.65VDC x battery number) ± 1%	
INDICATORS			
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions	
ALARM			
Battery Mode		Sounding every 4 seconds	
Low Battery		Sounding every 2 seconds	
Overload		Sounding twice every second	
Fault		Continuously sounding	
PHYSICAL			
Standard Model	Dimension, D x W x H (mm)	369 x 190 x 688	442 x 190 x 688
	Net Weight (kgs)	54	66
Long-run Model	Dimension, D x W x H (mm)	369 x 190 x 318	442 x 190 x 318
	Net Weight (kgs)	13	16
ENVIRONMENT			
Operating Humidity		20-95 % RH @ 0- 40°C (Non-condensing)	
Noise Level		Less than 55dB @1Meter	Less than 58dB @1Meter
MANAGEMENT			
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC	
Optional SNMP		Power management from SNMP manager and web browser	

* Derate capacity to 60% of capacity in CVCF mode and to 90% when the output voltage is adjusted to 208VAC or parallel system is operated.

**When using 16 pieces of batteries, the output power factor will be derated to 0.8. If using 18 or 19 pieces of batteries, the output power factor will be derated to 0.9

***If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.
Product specifications are subject to change without further notice.

Galleon One RT 6KVA/10KVA



- True double-conversion
- DSP technology guarantees high performance
- Output power factor 1
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- Generator compatible
- SNMP/USB/RS-232 communications
- Adjustable battery numbers
- Optional N+X parallel redundancy
- Adjustable charging current via LCD panel
- Supporting Hot Standby function

Galleon One 6KVA/10KVA Rack/Tower Online UPS Selection Guide

MODEL		Galleon One 6K(L) RT		Galleon One 10K(L) RT	
PHASE		1 phase in / 1 phase out			
CAPACITY*		6000 VA / 6000 W		10000 VA / 10000 W	
INPUT					
Nominal Voltage		208/220/230/240 VAC			
Voltage Range		110~300VAC ± 3 % at 50% load 176~300VAC ± 3 % at 100% load			
Frequency Range		46~54 Hz ◎ 50Hz / 56~64 Hz ◎ 60Hz			
Power Factor		≥ 0.99 @ full load			
THDi		< 4% @100% Load, < 6% @50% Load			
OUTPUT					
Output Voltage		208*/220/230/240 VAC		208*/220/230/240 VAC	
AC Voltage Regulation		± 1%			
Frequency Range (Synchronized Range)		46~54 Hz ◎ 50Hz / 56~64 Hz ◎ 60Hz			
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz			
Current Crest Ratio		3:1 (max.)			
Harmonic Distortion		≤ 1% THD (Linear Load), ≤ 4% THD (Non-linear Load)			
Transfer Time	AC Mode to Batt. Mode	Zero			
	Inverter to Bypass	Zero			
Waveform (Batt. Mode)		Pure Sinewave			
Overload	AC Mode	100%~110%: 10min · 110%~130%: 1min · >130%: 1sec			
	Battery Mode	100%~110%: 30sec · 110%~130%: 10sec · >130%: 1sec			
EFFICIENCY					
AC Mode		94%		94%	
ECO Mode		98.5%		98.5%	
Battery Mode		92%		92%	
BATTERY					
Standard Model	Battery Type	12 V / 7 AH		12 V / 9 AH	
	Numbers	16	20	16	20
	Typical Recharge Time	9 hours recover to 90% capacity			
	Charging Current (max.)	1.0 A			
	Charging Voltage	218.4 VDC ± 1%	273 VDC ± 1%	218.4 VDC ± 1%	273 VDC ± 1%
Long-run Model	Battery Type	Depending on applications			
	Numbers	16-20**			
	Charging Current (max.)	4.0 A			
	Charging Voltage	(13.65VDC x battery number) ± 1%			
INDICATORS					
LCD Panel		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions			
ALARM					
Battery Mode		Sounding every 4 seconds			
Low Battery		Sounding every second			
Overload		Sounding twice every second			
Fault		Continuously sounding			
PHYSICAL					
Standard Model	Dimension, D x W x H (mm)	UPS Unit: 610x438x88 [2U] Battery Pack: 715x438x88 [2U]	UPS Unit: 610x438x88 [2U] Battery Pack: 600x438x133 [3U]	UPS Unit: 610x438x88 [2U] Battery Pack: 715x438x88 [2U]	UPS Unit: 610x438x88 [2U] Battery Pack: 600x438x133 [3U]
	Net Weight (kgs)	UPS Unit: 17 Battery Pack: 48	UPS Unit: 17 Battery Pack: 57	UPS Unit: 20 Battery Pack: 53	UPS Unit: 20 Battery Pack: 63
Long-run Model	Dimension, D x W x H (mm)	610 x 438 x 88 [2U]		610 x 438 x 88 [2U]	
	Net Weight (kgs)	17		20	
ENVIRONMENT					
Operating Humidity		20-90 % RH @ 0- 40°C (non-condensing)			
Noise Level		Less than 55dB @ 1 Meter		Less than 58dB @ 1 Meter	
MANAGEMENT					
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC			
Optional SNMP		Power management from SNMP manager and web browser			

* Derate capacity to 60% of capacity in CVCF mode and to 90% when the output voltage is adjusted to 208VAC or parallel system is operated.

**When using 16 pieces of batteries, the output power factor will be derated to 0.8. If using 18 or 19 pieces of batteries, the output power factor will be derated to 0.9

If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

Product specifications are subject to change without further notice.

Galleon One 1KVA/1.5KVA/2KVA/3KVA


 Galleon One 2K
 Galleon One 3K

 Galleon One 1K
 Galleon One 1.5K

- True double-conversion
- Output power factor 0.96 ~ 1**
- Input power factor correction
- 50/60Hz Frequency Converter Mode
- ECO mode energy saving
- Emergency power off (EPO) function
- Provides over voltage cut-off protection and surge immunity by MOV for full time equipment protection
- High power factor charger up to 8A/12A capacity with very low ripple current when charging battery
- Low input THDi to reduce power system pollution
- Adjustable charging current via LCD panel
- Smart battery charger design to optimize battery performance
- Generator compatible
- Optional HID Power Device USB Port

Galleon One 1KVA/1.5KVA/2KVA/3KVA Online UPS Selection Guide

MODEL	Galleon One 1K		Galleon One 1.5K		Galleon One 2K		Galleon One 3K
PHASE	Single phase with ground						
CAPACITY*	1000 VA / 1000 W		1500 VA / 1450 W		2000 VA / 1930 W		3000 VA / 2880 W
INPUT							
Nominal Voltage	100/110/115/120/127 VAC						
Voltage Range	55-150 VAC ± 3 % at 50% load ; 80-150 VAC ± 3 % at 100% load						
Frequency Range	40Hz ~ 70Hz						
Power Factor	≧ 0.99 @ nominal voltage (100% load)						
THDi%	≦ 5%						
OUTPUT							
Output Voltage	100*/110*/115*/120/127 VAC						
Power Factor	> 0.96**						
AC Voltage Regulation (Batt. Mode)	± 1%						
Frequency Range (Synchronized Range)	47 ~ 53 Hz or 57~63Hz						
Frequency Range (Batt. Mode)	50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz						
Current Crest Ratio	3:1						
Harmonic Distortion	≦ 2% THD (Linear Load), ≦ 4 % THD (Non-linear Load)						
Transfer Time	AC to DC	Zero					
	Inverter to Bypass	4 ms (Typical)					
	ECO to Battery Mode	8 ms (Typical), 10 ms(max)					
Waveform (Batt. Mode)	Pure Sinewave						
EFFICIENCY							
Line Mode	≧ 89% @ battery fully charged				≧ 91% @ battery fully charged		
ECO Mode	≧ 96% @ battery fully charged						
Battery Mode	≧ 88%				≧ 90%		
BATTERY							
Battery Type	12 V / 9 AH	12 V / 7 AH	12 V / 9 AH	12 V / 9 AH	12 V / 7 AH	12 V / 9AH	
Numbers	2	3	3	4	6	6	
Typical Recharge Time	3 hours recover to 95% capacity for internal battery@ 2A charging current						
Charging Current	Default 2A, Max. 8A adjustable						
Charging Voltage	27.4VDC ± 1%	41.1VDC ± 1%	41.1VDC ± 1%	54.8VDC ± 1%	82.2VDC ± 1%	82.2VDC ± 1%	
INDICATORS							
LCD Panel	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator						
ALARM							
Battery Mode	Sounding every 5 seconds						
Low Battery	Sounding every 2 seconds						
Overload	Sounding every second						
Fault	Continuously sounding						
PHYSICAL							
Dimension, D x W x H (mm)	397 x 145 x 220				421 x 190 x 318		
Net Weight (without battery) (kgs)	6.6	6.6	7	9.9	9.9	12.3	
Net Weight (w/ built-in battery) (kgs)	11.7	13	14.6	20.3	23.2	28	
ENVIRONMENT							
Humidity	20-95 % RH @ 0- 45°C (non-condensing)						
Noise Level	Less than 50dBA @ 1 Meter with Fan speed control						
Altitude	10% de-rating for over 1000m (The altitude should not exceed 3000m)						
MANAGEMENT							
Smart RS-232 / USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC						
Optional SNMP	Power management from SNMP manager and web browser						
STANDARD							
EMC/Safety	cTUVus (comply to UL1778), Fcc (1-1.5K Class B, 2-3K Class A)						

*Derate capacity to 80% when the output voltage is adjusted to 100VAC.

**The output power factor is based on the input voltage. This figure is based on 127V input voltage.
 Product specifications are subject to change without further notice.

Galleon One RT 1KVA/1.5KVA/2KVA/3KVA



- True double-conversion
- Output power factor 0.96 ~ 1**
- Output voltage regulation < 1%
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- Hot swappable battery design
- ECO mode energy saving
- Provides over voltage cut-off protection and surge immunity by MOV for full time equipment protection
- High power factor charger upto 8A/12A capacity with very low ripple current when charging battery
- Low input THDi to reduce power system pollution
- Adjustable charging current via LCD panel
- Smart battery charger design to optimize battery performance
- Generator compatible
- Optional HID Power Device USB Port

Galleon One 1KVA/1.5KVA/2KVA/3KVA Rack/Tower Online UPS Selection Guide

MODEL		Galleon One RT 1K		Galleon One RT 1.5K		Galleon One RT 2K		Galleon One RT 3K	
PHASE		Single phase with ground							
CAPACITY*		1000 VA / 1000 W		1500 VA / 1450 W		2000 VA / 1930 W		3000 VA / 2880 W	
INPUT									
Nominal Voltage		100/110/115/120 /127 VAC							
Voltage Range		55 - 150 VAC ± 3 % at 50% load 80 - 150 VAC ± 3 % at 100% load							
Frequency Range		40 Hz ~ 70 Hz							
Power Factor		≧ 0.99 @ nominal voltage (100% load)							
Harmonic Distortion(THDi)		≤ 5% @ nominal input voltage							
OUTPUT									
Output Voltage		100*/110*/115*/120/127 VAC							
Power Factor		> 0.96**							
AC Voltage Regulation (Batt. Mode)		± 1%							
Frequency Range (Synchronized Range)		57 ~ 63 Hz or 47 ~ 53 Hz							
Frequency Range (Batt. Mode)		60Hz ± 0.1Hz or 50 Hz ± 0.1Hz							
Current Crest Ratio		3:1 (max.)							
Harmonic Distortion		≤ 2 % THD (Linear Load) ; ≤ 4 % THD (Non-linear Load)							
Transfer Time	AC Mode to Batt. Mode	Zero							
	Inverter to Bypass	4 ms (Typical)							
Waveform (Batt. Mode)		Pure Sinewave							
EFFICIENCY									
AC Mode		≧ 89% @ full charged battery				≧ 91% @ full charged battery			
ECO Mode		≧ 96% @ full charged battery							
Battery Mode		≧ 88%				≧ 90%			
BATTERY									
Battery Type		12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah		
Numbers		2	3	3	4	6	6		
Typical Recharge Time		3 hours recover to 95% capacity for internal battery@ 2A charging current							
Charging Current		Default 2A, Max. 8A adjustable							
Charging Voltage		27.4 VDC ± 1%	41.1 VDC ± 1%	41.1 VDC ± 1%	54.8 VDC ±1%	82.1 VDC ±1%	82.1 VDC ±1%		
INDICATORS									
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions							
ALARM									
Battery Mode		Sounding every 5 seconds							
Low Battery		Sounding every 2 seconds							
Overload		Sounding every second							
Fault		Continuously sounding							
PHYSICAL									
Dimension, D x W x H (mm)		410 x 438 x 88		410 x 438 x 88	510 x 438 x 88	630 x 438 x 88	630 x 438 x 88		
Net Weight (without battery) (kgs)		6.6	7.8	8.1	9.4	10.6	12.4		
Net Weight (w/built-int battery) (kgs)		11.6	14.1	15.5	19.5	23.3	27.5		
ENVIRONMENT									
Humidity		20-90 % RH @ 0- 40°C (non-condensing)							
Noise Level		Less than 50dB @ 1 Meter							
Altitude		10% de-rating for over 1000m (The altitude should not exceed 3000m)							
MANAGEMENT									
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC							
Optional SNMP		Power management from SNMP manager and web browser							
STANDARD									
EMC/safety		cTUVus (comply with UL1778), Fcc (1-1.5K Class B, 2-3K Class A)							

*Derate capacity to 80% when the output voltage is adjusted to 100VAC.

**The output power factor is based on the input voltage. This figure is based on 127V input voltage. Product specifications are subject to change without further notice.

Galleon One RT 6KVA/10KVA



- True double-conversion
- DSP technology guarantees high performance
- Output power factor 1
- Active input power factor correction 0.99
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- Generator compatible
- SNMP/USB/RS-232 communications
- Adjustable battery numbers
- Optional N+X parallel redundancy
- Adjustable charging current via LCD panel
- Supporting Hot Standby function

Galleon One 6KVA/10KVA Rack/Tower Online UPS Selection Guide

MODEL		Galleon One 6K(L) RT		Galleon One 10K(L) RT	
PHASE		1 phase in / 1 phase out			
CAPACITY*		6000 VA / 6000 W		10000 VA / 10000 W	
INPUT					
Nominal Voltage		208/220/230/240 VAC			
Voltage Range		110~300VAC @ (0~60%) Load ; 176~300VAC @ (80~100%) Load			
Frequency Range		46~54 Hz Ⓢ 50Hz / 56~64 Hz Ⓢ 60Hz			
Power Factor		≥ 0.99 @ full load			
THDi		< 4% @100% Load, < 6% @50% Load			
OUTPUT					
Output Voltage		104/110/115/120VAC		104/110/115/120VAC	
AC Voltage Regulation		± 1%			
Frequency Range (Synchronized Range)		46~54 Hz Ⓢ 50Hz / 56~64 Hz Ⓢ 60Hz			
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz			
Current Crest Ratio		3:1 (max.)			
Harmonic Distortion		≤ 2% THD (Linear Load), ≤ 6% THD (Non-linear Load)			
Transfer Time	AC Mode to Batt. Mode	Zero			
	Inverter to Bypass	Zero			
Waveform (Batt. Mode)		Pure Sinewave			
Overload	AC Mode	100%~110%: 10min · 110%~130%: 1min · >130% : 1sec			
	Battery Mode	100%~110%: 30sec · 110%~130%: 10sec · >130% : 1sec			
EFFICIENCY					
Line Mode		89%			
ECO Mode		95%			
Battery Mode		89%			
BATTERY					
Standard Model	Battery Type	12 V / 7 AH		12 V / 9 AH	
	Numbers	16	20	16	20
	Typical Recharge Time	9 hours recover to 90% capacity			
	Charging Current (max.)	1.0 A			
	Charging Voltage	218.4 VDC ± 1%	273 VDC ± 1%	218.4 VDC ± 1%	273 VDC ± 1%
Long-run Model	Battery Type	Depending on applications			
	Numbers	16-20**			
	Charging Current (max.)	4.0 A			
	Charging Voltage	(13.65VDC x battery number) ± 1%			
INDICATORS					
LCD Panel		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions			
ALARM					
Battery Mode		Sounding every 4 seconds			
Low Battery		Sounding every second			
Overload		Sounding twice every second			
Fault		Continuously sounding			
PHYSICAL					
Standard Model	Dimension, DxWxH(mm)	UPS Unit: 610x438x88 [2U] ; Battery Pack: 715x438x88 [2U] ISO bank: 606 x 438 x 133 [3U]	UPS Unit: 610 x 438 x 88 [2U] Battery Pack: 600 x 438 x 133 [3U] ISO bank: 606 x 438 x 133 [3U]	UPS Unit: 610x438x88 [2U] ; Battery Pack: 715x438x88 [2U] ISO bank: 686 x 438 x 133 [3U]	UPS Unit: 610 x 438 x 88 [2U] Battery Pack: 600 x 438 x 133 [3U] ISO bank: 686 x 438 x 133 [3U]
	Net Weight (kgs)	UPS Unit: 17 Battery Pack: 48 ; ISO bank: 67	UPS Unit: 17 Battery Pack: 57 ; ISO bank: 67	UPS Unit: 20 Battery Pack: 53 ; ISO bank: 90	UPS Unit: 20 Battery Pack: 63 ; ISO bank: 90
Long-run Model	Dimension, DxWxH(mm)	UPS Unit: 610x 438 x 88 [2U] ; ISO bank: 606 x 438 x 133 [3U]		UPS Unit: 610 x 438 x 88 [2U] ; ISO bank: 686 x 438 x 133 [3U]	
	Net Weight (kgs)	S Unit: 17 ; ISO bank: 67		UPS Unit: 20 ; ISO bank: 90	
ENVIRONMENT					
Operating Humidity		20-90 % RH @ 0- 40°C (non-condensing)			
Noise Level		Less than 55dB @ 1 Meter		Less than 58dB @ 1 Meter	
MANAGEMENT					
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC			
Optional SNMP		Power management from SNMP manager and web browser			

* Derate capacity to 60% of capacity in CVCF mode and to 90% when the output voltage is adjusted to 208VAC or parallel system is operated.

**When using 16 pieces of batteries, the output power factor will be derated to 0.8. If using 18 or 19 pieces of batteries, the output power factor will be derated to 0.9. If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

Product specifications are subject to change without further notice.

Otima II LiFe



- Line interactive sine wave output
- User-friendly and easy rotate LCD display
- Rack/Tower design
- Built-in boost and buck AVR
- Output power factor 0.9
- Fast battery recharge time
- Programmable power management outlets
- Hot-swappable battery design
- Support half-cycle, inductive and PFC equipment
- More than 8 minutes full load backup time
- Optional HID Power Device USB Port

Otima II LiFe UPS Line Interactive Sinewave UPS Selection Guide

MODEL	Otima II LiFe 800	Otima II LiFe 1000	Otima II LiFe 1500	Otima II LiFe 2000	Otima II LiFe 3000
CAPACITY	800VA / 720W	1000 VA / 900 W	1500 VA / 1350 W	2000 VA / 1800 W	3000 VA / 2700 W
INPUT					
Nominal Voltage	110/115/120/127 VAC or 208/220/230/240 VAC				
Acceptable Voltage Range	81-152 VAC or 162-290 VAC				
Frequency Range	60/50 Hz (auto sensing)				
OUTPUT					
Output Voltage	110/115/120/127 VAC or 208/220/230/240 VAC				
Voltage Regulation (Batt. Mode)	±1.5% (before battery alarm)				
Frequency Range (Batt. Mode)	50 Hz or 60 Hz ± 1 Hz				
Current Crest Ratio	3:1				
Harmonic Distortion	2% max @ 100% linear load, 5% max @ 100% non-linear load (before low battery alarm)				
Transfer Time	Typical 2-6 ms, 10ms max.				
Waveform (Batt. Mode)	Pure Sinewave				
EFFICIENCY					
ECO Mode	97%				
Buck & Boost Mode	95%				
Battery Mode	≥ 90% @ nominal battery voltage			≥ 92% @ nominal battery voltage	
BATTERY					
Battery Type	LiFe 24V/7.5Ah x 1	LiFe 24V/7.5Ah x 1	LiFe 48V/5Ah x 1	LiFe 72V/2.5Ah x 2	LiFe 72V/2.5Ah x 3
Charging Current (max.)	4A				
Typical Recharge Time	4 hours recover to 90% capacity				
PROTECTION					
Full Protection	Overload, discharge, and overcharge protection				
INDICATORS					
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault and Low Battery				
ALARM					
Battery Mode	Sounding every 10 seconds				
Low Battery	Sounding every 2 seconds				
Overload	Sounding every second				
Fault	Continuously sounding				
PHYSICAL					
Dimension,DxWxH(mm)	410 x 438 x 88			510 x 438 x 88	630 x 438 x 88
Net Weight (kgs)	12.5	12.5	14.5	17.5	33.5
ENVIRONMENT					
Humidity	0-90 % RH @ 0- 40°C (Non-condensing)				
Noise Level	Less than 45dB				
Altitude	10% de-rating for over 1000m (The altitude should not exceed 3000m)				
MANAGEMENT					
USB or RS-232	Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC				
Dry Contact (Option)	Power management from SNMP manager and web browser				

*Derate capacity to 80% of capacity when the output voltage is adjusted to 208VAC.
Product specifications are subject to change without further notice.

Galleon LiFe

Galleon LiFe 2000
Galleon LiFe 3000Galleon LiFe 1000
Galleon LiFe 1500

- Output power factor 0.9
- Input power factor correction
- Fast battery recharge time shorten to 1.5 hours
- More than 8 min. full load backup time
- Charging current is selectable through LCD display
- Programmable outlet management
- Generator compatible
- Optional HID Power Device USB Port

Galleon LiFe Online UPS Selection Guide

MODEL		Galleon LiFe 1000	Galleon LiFe 1500	Galleon LiFe 2000	Galleon LiFe 3000
PHASE		Single phase with ground			
CAPACITY*		1000 VA / 900 W	1500 VA / 1350 W	2000 VA / 1800 W	3000 VA / 2700 W
INPUT					
Nominal Voltage		100*/110*/115*/120 /127 VAC or 200*/208*/220/230/240 VAC			
Voltage Range		55-150 VAC ± 3% or 110-300 VAC ± 3% at 50% load 80-150 VAC ± 3% or 160-300 VAC ± 3% at 100% load			
Frequency Range		40Hz ~ 70Hz			
Power Factor		≥ 0.99 @ nominal voltage (100% load)			
THDi%		≤ 5%			
OUTPUT					
Voltage		100*/110*/115*/120 /127 VAC or 200*/208*/220/230/240 VAC			
Voltage Regulation		± 1%			
Frequency Range (Synchronized Range)		57 ~ 63 Hz or 47 ~ 53 Hz			
Frequency Range (Batt. Mode)		60 Hz ± 0.1 Hz or 50 Hz ± 0.1 Hz			
Current Crest Ratio		3:1			
Harmonic Distortion		≤ 2% THD (Linear Load), ≤ 4 % THD (Non-linear Load)			
Transfer Time	AC to DC	Zero			
	Inverter to Bypass	4 ms (Typical)			
	ECO to Battery Mode	8 ms (Typical), 10 ms(max)			
Waveform (Batt. Mode)		Pure Sinewave			
EFFICIENCY					
Line Mode		≥ 89% @ battery fully charged		≥ 91% @ battery fully charged	
ECO Mode		≥ 96% @ battery fully charged			
Battery Mode		≥ 88%		≥ 90%	
BATTERY					
Battery Type		LiFe 24V/7.5Ah x 1	LiFe 48V/5Ah x 1	LiFe 72V/2.5Ah x 2	LiFe 72V/2.5Ah x 3
Charging Current (max.)		8A (Selectable from LCD display)			
Typical Recharge Time		1.5 hours for fully charged			
INDICATORS					
LCD Panel		Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator Via LCD			
ALARM					
Battery Mode		Sounding every 4 seconds			
Low Battery		Sounding every second			
Overload		Sounding twice every second			
Fault		Continuously sounding			
PHYSICAL					
Dimension, D x W x H (mm)		397 x 158 x 220		480 x 158 x 220	590 x 190 x 318
Net Weight (without battery) (kgs)		9.4	11	15.5	21.5
ENVIRONMENT					
Humidity		20-95 % RH @ 0- 45°C (non-condensing)			
Noise Level		Less than 50dBA @ 1 Meter with Fan speed control			
MANAGEMENT					
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC			
Optional SNMP		Power management from SNMP manager and web browser			

*Derate capacity to 95% when the output voltage is adjusted to 115VAC, derate capacity to 90% when the output voltage is adjusted to 110VAC and derate capacity to 80% when the output voltage is adjusted to 100VAC/200VAC/208VAC.
Product specifications are subject to change without further notice.

Galleon One 5KL-48V



- True double-conversion
- Pure Sine-wave output
- Output Power Factor 1.0
- Configurable charging current via LCD setting
- Compatible with Generator
- Cold Start capability
- Overload and short circuit protection
- Very powerful AC charger at 60A
- Optional parallel operation up to 9 units for Single Phase and Three Phase application
- Common 48Vdc battery pack for the parallel system
- Full Bridge inverter design to support half-wave load and unbalanced load

Galleon One 5KL-48V Online UPS Specification

MODEL		Galleon One 5KL-48V
CAPACITY		5000VA/5000W
INPUT		
Voltage		220/230/240 VAC
Voltage Range		110-280 VAC @ 50% load ; 176-280 VAC @ 100% load
Frequency Range		46~54 Hz or 56~64 Hz
Power Factor		≥ 0.98 @ Nominal Voltage (100% Load)
THDi		$\leq 8\%$
OUTPUT		
Output Voltage		220/230/240 VAC
AC Voltage Regulation (Batt. Mode)		$\pm 1\%$
Frequency Range (Synchronized Range)		46~54 Hz or 56~64 Hz
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz
Current Crest Ratio		3:1
Harmonic Distortion		$\leq 3\%$ THD (Linear Load), $\leq 5\%$ THD (Non-linear Load)
Transfer Time	AC Mode to Batt. Mode	Zero
	Inverter to Bypass	4 ms (Typical)
Waveform		Pure Sinewave
EFFICIENCY		
Line Mode		93.0%
ECO Mode		99.5%
Battery Mode		91.0%
BATTERY		
Battery Voltage		48 VDC
Floating Charge Voltage		54.6 VDC
Overcharge Protection		60 VDC
Charging Current (max.)		60 A
INDICATORS		
LCD Panel		Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator Via LCD
PHYSICAL		
Dimension, D x W x H(mm)		465 x 190 x 318
Net Weight (kgs)		15.5
Communication Interface		RS232 & USB
OPERATING ENVIRONMENT		
Humidity		0 to 95% Relative Humidity(Non-condensing)
Operating Temperature		0°C to 50°C
Storage Temperature		-15°C to 60°C

Product specifications are subject to change without further notice

Solar UPS



- True double-conversion online UPS
- Output power factor 1.0
- Built-in 80A MPPT solar charger and 60A AC charger
- Configurable AC/Solar input priority via LCD setting
- Parallel operation up to 9 units
- Common 48Vdc battery pack for the parallel system
- Configurable charging current via LCD setting
- Compatible with Generator
- Cold Start capability
- Overload and short circuit protection

Solar UPS Specification

MODEL		Solar UPS 5KW
MAXIMUM PV INPUT POWER		6000W
CAPACITY		5000VA/5000W
INPUT		
Voltage		230 VAC
Voltage Range		110-280 VAC
Frequency Range		50 Hz/60 Hz (Auto sensing) $\pm$ 4Hz
Power Factor		$\geq$ 0.98 @ Nominal Voltage (100% Load)
THDi		$\leq$ 10%
OUTPUT		
AC Voltage Regulation (Batt. Mode)		230VAC $\pm$ 5%
Frequency Range (Synchronized Range)		46~54 Hz or 56~64 Hz
Frequency Range (Batt. Mode)		50 Hz
Harmonic Distortion		$\leq$ 3% THD (Linear Load), $\leq$ 5 % THD (Non-linear Load)
Transfer Time	AC Mode to Batt. Mode	Zero
	Inverter to Bypass	4 ms (Typical)
Waveform		Pure Sinewave
EFFICIENCY		
Line Mode		93.0%
ECO Mode		99.0%
Battery Mode		90.0%
BATTERY		
Battery Voltage		48 VDC
Floating Charge Voltage		54 VDC
Overcharge Protection		66 VDC
SOLAR CHARGER & AC CHARGER		
Solar Charger type		MPPT
Maximum PV Array Power		4000 W
MPPT Range @ Operating Voltage		60 ~ 115 VDC
Maximum PV Array Open Circuit Voltage		145 VDC
Maximum Solar Charge Current		80 A
Maximum AC Charge Current		60 A
Maximum Charger Current		140 A
PHYSICAL		
Dimension, D x W x H(mm)		465 x 190 x 336
Net Weight (kgs)		16
Communication Interface		RS232 & USB
OPERATING ENVIRONMENT		
Humidity		5% to 95% Relative Humidity(Non-condensing)
Operating Temperature		-10°C to 50°C
Storage Temperature		-15°C to 60°C

Product specifications are subject to change without further notice

Winner Pro 3P/1P



Winner Pro 3/1 20K Winner Pro 3/1 10K Winner Pro 3/1 10KL/15KL
Winner Pro 3/1 15K Winner Pro 3/1 20KL

- True double-conversion
- Output power factor 0.8
- Wide input voltage range
- 50Hz frequency converter mode
- Emergency power off function (EPO)
- Generator compatible
- SNMP+USB+RS-232 multiple communications
- 3-stage extendable charging design for optimized battery performance
- Optional maintenance bypass switch
- Supports 3P/1P & 1P/1P operation

Winner Pro 3-phase in/1-phase out Online UPS Selection Guide

MODEL		Winner Pro 3/1 10K (L)		Winner Pro 3/1 15K (L)		Winner Pro 3/1 20K (L)	
PHASE		3 phase in / 1 phase out					
CAPACITY		10000 VA / 8000 W		15000 VA / 12000 W		20000 VA / 16000 W	
INPUT							
Nominal Voltage		3 x 400 VAC (3Ph+N)					
Voltage Range		190-520 VAC (3-phase) @ 50% load 305-520 VAC (3-phase) @ 100% load					
Frequency Range		46~54 Hz					
OUTPUT							
Output Voltage		208/220/230/240VAC					
AC Voltage Regulation (Batt. Mode)		± 1%					
Frequency Range (Synchronized Range)		46~54Hz					
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz					
Current Crest Ratio		3:1 (max.)					
Harmonic Distortion		≤ 3 % THD (Linear Load) ; ≤ 5 % THD (Non-linear Load)					
Transfer Time	AC Mode to Batt. Mode	Zero					
	Inverter to Bypass	Zero					
Waveform (Batt. Mode)		Pure Sinewave					
EFFICIENCY							
AC Mode		91%		91%		91%	
Battery Mode		91%		91%		91%	
BATTERY							
Standard Model	Battery Type	12 V / 9 AH					
	Numbers	16 pcs	20 pcs	16 pcs	20 pcs	16 pcs x 2 strings	20 pcs x 2 strings
	Typical Recharge Time	9 hours recover to 90% capacity					
	Charging Current (max.)	1A ± 10%				1A/2A/4A ± 10% (2A default)	
	Charging Voltage	218.4 VDC ± 1%	273 VDC ± 1%	218.4 VDC ± 1%	273 VDC ± 1%	218.4 VDC ± 1%	273 VDC ± 1%
Long-run Model	Battery Type	Depending on the capacity of external batteries					
	Numbers	16 pcs	20 pcs	16 pcs	20 pcs	16 pcs	20 pcs
	Charging Current (max.)	4A Default, 1A/2A/4A (Adjustable)					
	Charging Voltage	218.4 VDC ± 1%	273 VDC ± 1%	218.4 VDC ± 1%	273 VDC ± 1%	218.4 VDC ± 1%	273 VDC ± 1%
INDICATORS							
LCD Panel		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions					
ALARM							
Battery Mode		Sounding every 4 seconds					
Low Battery		Sounding every second					
Overload		Sounding twice every second					
Fault		Continuously sounding					
PHYSICAL							
Standard Model	Dimension, D x W x H (mm)	442 x 190 x 688		442 x 190 x 688		815 x 250x 826	
	Net Weight (kgs)	66	76	67	78	125	145
Long-run Model	Dimension, D x W x H (mm)	442 x 190 x 318				575 x 190 x 318	
	Net Weight (kgs)	15		16		18.95	
ENVIRONMENT							
Operating Humidity		0-95 % RH @ 0- 50°C (Non-condensing)					
Noise Level		Less than 60dB @ 1 Meter					
MANAGEMENT							
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC					
Optional SNMP		Power management from SNMP manager and web browser					

Product specifications are subject to change without further notice.

Galleon Pro 3P/1P Tower



- True double-conversion
- DSP technology guarantees high performance
- Output power factor 0.9
- Active power factor correction in all phases
- Support both 3P/1P and 1P/1P operation
- 50Hz/60Hz frequency converter mode
- ECO mode operation for energy saving
- Programmable power management outlets
- Emergency power off function (EPO)
- Generator compatible
- SNMP+USB+RS-232 multiple communications
- 3-stage extendable charging design for optimized battery performance
- Adjustable battery numbers
- Maintenance bypass available
- Optional N+X parallel redundancy

Galleon Pro 3-phase in/1-phase out Online UPS Selection Guide

MODEL		Galleon Pro 3/1-10K (L)	Galleon Pro 3/1-15K (L)	Galleon Pro 3/1-20K (L)	Galleon Pro 3/1-30K (L)
PHASE		3-phase in / 1-phase out			
CAPACITY		10000 VA / 9000 W	15000 VA / 13500 W	20000 VA / 18000 W	30000 VA / 27000 W
INPUT					
Nominal Voltage		3 x 400 VAC (3Ph+N)			
Voltage Range		190-520 VAC (3-phase) @ 50% load ; 305-478 VAC (3-phase) @ 100% load			
Frequency Range		46~54Hz or 56~64Hz			
Power Factor		≥ 0.99 @ 100% Load			
THDi		< 6% @ 100% load			
OUTPUT					
Output Voltage		208/220/230/240VAC			
AC Voltage Regulation (Batt. Mode)		± 1%			
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz			
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz			
Current Crest Ratio		3:1 (max.)			
Harmonic Distortion		≤ 2 % THD (Line ar Load) ≤ 5 % THD (Non-linear Load)			
Transfer Time	AC Mode to Batt. Mode	Zero			
	Inverter to Bypass	Zero			
Waveform (Batt. Mode)		Pure Sinewave			
EFFICIENCY					
AC Mode		91.5%	91.8%	91.8%	92.1%
ECO Mode		97%	97%	97%	97%
Battery Mode		87%	88%	88%	89%
BATTERY					
Standard Model	Battery Type	12 V / 9 Ah			
	Numbers	20 pcs (18 - 20 pcs adjustable)*	20 pcs (18 - 20 pcs adjustable)* x 2 strings		20pcs(18-20pcs adjustable)* x3 strings
	Typical Recharge Time	9 hours recover to 90% capacity			
	Charging Current (max.)	1A	2A	2A	4A
	Charging Voltage	273 VDC ± 1% (Based on 20pcs batteries)			
Long-run Model	Battery Type	Depending on applications			
	Numbers				
	Charging Current (max.)	4A	8A	8A	12A
	Charging Voltage	273 VDC ± 1% (Based on 20pcs batteries)			
INDICATORS					
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions			
ALARM					
Battery Mode		Sounding every 4 seconds			
Low Battery		Sounding every second			
Overload		Sounding twice every second			
Fault		Continuously sounding			
PHYSICAL					
Standard Model	Dimension, D x W x H (mm)	592 x 250 x 576	815 x 250 x 826		815 x 300 x 1000
	Net Weight (kgs)	83	164	164	234
Long-run Model	Dimension, D x W x H (mm)	592 x 250 x 576	592 x 250 x 576	592 x 250 x 576	815 x 250 x 826
	Net Weight (kgs)	28	40	40	64
ENVIRONMENT					
Operating Humidity		0-95 % RH @ 0- 40°C (Non-condensing)			
Noise Level		Less than 58dB @ 1 Meter	Less than 60dB @1 Meter		Less than 65dB @1 Meter
MANAGEMENT					
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC			
Optional SNMP		Power management from SNMP manager and web browser			

* L means long-run model.

**When using internal batteries from 18-19, the unit will de-rate according to below formula: P = P_{Rating} x N/20.

**Derate capacity to 90% of capacity when the output voltage is adjusted to 208VAC.
Product specifications are subject to change without further notice.

Galleon Pro 3P/1P Rackmount



Galleon Pro 3/1-10KR(L)

Galleon Pro 3/1-15KR(L)
Galleon Pro 3/1-20KR(L)

- True double-conversion
- DSP technology guarantees high performance
- Output power factor 0.9
- Active power factor correction in all phases
- Support 3P/1P and 1P/1P operation
- 50Hz/60Hz frequency converter mode
- ECO mode operation for energy saving
- Emergency power off function (EPO)
- Generator compatible
- SNMP+USB+RS-232 multiple communications
- 3-stage extendable charging design for optimized battery performance
- Adjustable battery numbers
- Optional N+X parallel redundancy

Galleon Pro 3-phase in / 1-phase out Rack Online UPS Selection Guide

MODEL		Galleon Pro 3/1-10KR (L)		Galleon Pro 3/1-15KR (L)	Galleon Pro 3/1-20KR (L)
PHASE				3-phase in / 1-phase out	
CAPACITY		10000 VA/9000 W		15000 VA/13500 W	20000 VA / 18000 W
INPUT					
Nominal Voltage		3 x 400 VAC (3Ph+N)			
Voltage Range		190-520 VAC (3-phase) at 50% load ; 305-478 VAC (3-phase) at 100% load			
Frequency Range		46~54 Hz or 56~64Hz			
Power Factor		≥ 0.99 @ 100% Load			
THDi		< 6% @ 100% Load			
OUTPUT					
Output Voltage		208/220/230/240VAC			
AC Voltage Regulation (Batt. Mode)		± 1%			
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz			
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz			
Current Crest Ratio		3:1			
Harmonic Distortion		≤ 2 % THD (Linear Load) ≤ 5 % THD (Non-linear Load)			
Transfer Time	AC Mode to Batt. Mode	Zero			
	Inverter to Bypass	Zero			
Waveform (Batt. Mode)		Pure Sinewave			
EFFICIENCY					
AC Mode		90.5%		91%	
ECO Mode		96%		96%	
Battery Mode		87%		88%	
BATTERY					
Standard Model	Battery Type	12 V / 9 Ah			
	Numbers	20 (18 - 20 pcs* adjustable)	20 pcs x 2 strings (18 - 20 pcs* adjustable)		
	Typical Recharge Time	9 hours recover to 90% capacity			
	Charging Current (max.)	1A	2A		
	Charging Voltage	273 VDC ± 1% (based on battery numbers at 20 pcs)			
Long-run Model	Battery Type	Depending on the capacity of external batteries			
	Numbers				
	Charging Current (max.)	4A			
	Charging Voltage	273 VDC ± 1% (based on battery numbers at 20 pcs)			
INDICATORS					
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions			
ALARM					
Battery Mode		Sounding every 4 seconds			
Low Battery		Sounding every second			
Overload		Sounding twice every second			
Fault		Continuously sounding			
PHYSICAL					
Standard Model	Dimension, D x W x H (mm)	UPS unit:668 x 438 x 133 [3U] Battery pack: 580 x 438 x 133 [3U]	UPS unit:668 x 438 x 266 [6U] Battery pack: 580 x 438 x 133 [3U] x 2PCS		
	Net Weight (kgs)	UPS unit: 22 Battery pack: 63	UPS unit: 45 Battery pack: 63 x 2 pcs		
Long-run Model	Dimension, D x W x H (mm)	668 x 438 x 133 [3U]	668 x 438 x 266 [6U]		
	Net Weight (kgs)	22	45		
ENVIRONMENT					
Operating Humidity		0-95 % RH @ 0- 40°C (Non-condensing)			
Noise Level		Less than 60dB @ 1 Meter	Less than 65dB @ 1 Meter		
MANAGEMENT					
Smart RS-232 / USB		Supports Windows* 2000/2003/XP/Vista/2008, Windows* 7/8/10, Linux and MAC			
Optional SNMP		Power management from SNMP manager and web browser			

*When using internal batteries from 18-19, the unit will de-rate according to the below formula: P = P_{Rating} x N/20.
Product specifications are subject to change without further notice.

Galleon Pro 3P/3P



Galleon Pro 3/3-30K

Galleon Pro 3/3-30KL

Galleon Pro 3/3-10KL

Galleon Pro 3/3-15KL

Galleon Pro 3/3-10K

Galleon Pro 3/3-15K

Galleon Pro 3/3-20KL

Galleon Pro 3/3-20K

- True double-conversion
- DSP technology guarantees high performance
- Output power factor 0.9
- Active power factor correction in all phases
- 50Hz/60Hz frequency converter mode
- ECO mode operation for energy saving (ECO)
- Accepts dual-mains inputs (Only for 10K/15K/20K models)
- Emergency power off function (EPO)
- Generator compatible
- SNMP+USB+RS-232 multiple communications
- 3-stage extendable charging design for optimized battery performance
- Adjustable battery numbers
- Maintenance bypass available
- Optional N+X parallel redundancy

Galleon Pro 3-phase in/3-phase out Online UPS Selection Guide

MODEL		Galleon Pro 3/3-10K (L)	Galleon Pro 3/3-15K (L)	Galleon Pro 3/3-20K (L)	Galleon Pro 3/3-30K (L)
PHASE		3-phase in / 3-phase out			
CAPACITY		10000 VA / 9000 W	15000 VA / 13500 W	20000 VA / 18000 W	30000 VA / 27000 W
INPUT					
Nominal Voltage		3 x 400 VAC (3Ph+N)			
Input Voltage Range		190-520 VAC (3-phase) at 50% load ; 305-478 VAC (3-phase) at 100% load			
Frequency Range		46~54 Hz or 56~64Hz			
Power Factor		≥ 0.99 @ 100% Load			
OUTPUT					
Output Voltage		3 x 400 VAC (3Ph+N)			
AC Voltage Regulation (Batt. Mode)		± 1%			
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz			
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz			
Current Crest Ratio		3:1 (max.)			
Harmonic Distortion		≤ 2 % THD (Linear Load) ; ≤ 5 % THD (Non-linear Load)			
Transfer Time	AC Mode to Batt. Mode	Zero			
	Inverter to Bypass	Zero			
Waveform (Batt. Mode)		Pure Sinewave			
EFFICIENCY					
AC Mode		90.5%	91.5%	91.5%	92.1%
ECO Mode		96%			
Battery Mode		87%	88%	88%	89%
BATTERY					
Standard Model	Battery Type	12 V / 9 Ah			
	Numbers	20 pcs (18 - 20 adjustable)*	20 pcs (18 - 20 adjustable)*x 2 strings		20pcs (18-20 adjustable)* x 3 strings
	Typical Recharge Time	9 hours recover to 90% capacity			
	Charging Current (max.)	1A	2A	2A	4A
	Charging Voltage	273 VDC ± 1%			
Long-run Model	Battery Type	Depending on the capacity of external batteries			
	Numbers				
	Charging Current (max.)	4A	4A	4A	12A
	Charging Voltage	273 VDC ± 1%			
INDICATORS					
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault			
ALARM					
Battery Mode		Sounding every 4 seconds			
Low Battery		Sounding every second			
Overload		Sounding twice every second			
Fault		Continuously sounding			
PHYSICAL					
Standard Model	Dimension, D x W x H (mm)	815 x 250 x 826	815 x 250 x 826	815 x 250 x 826	815 x 300 x 1000
	Net Weight (kgs)	109	164	164	233.5
Long-run Model	Dimension, D x W x H (mm)	592 x 250 x 826	592 x 250 x 826	592 x 250 x 826	815 x 250 x 826
	Net Weight (kgs)	38	40	40	64
ENVIRONMENT					
Operating Humidity		0-95 % RH @ 0- 40°C (Non-condensing)			
Noise Level		Less than 60dB @ 1 Meter	Less than 65dB @ 1 Meter		
MANAGEMENT					
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC			
Optional SNMP		Power management from SNMP manager and web browser			

*When using internal batteries from 18-19, the unit will de-rate according to the below formula: P = P_{Rating} x N/20.
Product specifications are subject to change without further notice.

Galleon Pro 3P/3P Rackmount



- True double-conversion
- DSP technology guarantees high performance
- Output power factor 0.9
- Active power factor correction in all phases
- 50Hz/60Hz frequency converter mode
- Eco mode operation for energy saving (ECO)
- Accepts dual power inputs
- Emergency power off function (EPO)
- Generator compatible
- SNMP+USB+RS-232 multiple communications
- 3-stage extendable charging design for optimized battery performance
- Adjustable battery numbers
- Optional N+X parallel redundancy
- Optional isolation transformer offers full isolation and complete common mode noise

Galleon Pro 3-phase in / 3-phase out Rack Online UPS Selection Guide

MODEL		Galleon Pro 3/3-10KR (L)	Galleon Pro 3/3-15KR (L)	Galleon Pro 3/3-20KR (L)
PHASE		3-phase in / 3-phase out		
CAPACITY		10000 VA / 9000 W	15000 VA / 13500 W	20000 VA / 18000 W
INPUT				
Nominal Voltage		3 x 400 VAC (3Ph+N)		
Voltage Range		190-520 VAC (3-phase) at 50% load ; 305-478 VAC (3-phase) at 100% load		
Frequency Range		46~54 Hz or 56~64Hz		
Power Factor		≥ 0.99 @ 100% Load		
OUTPUT				
Output Voltage		3 x 400 VAC (3Ph+N)		
AC Voltage Regulation (Batt. Mode)		± 1%		
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz		
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz		
Current Crest Ratio		3:1 (max.)		
Harmonic Distortion		≤ 2 % THD (Linear Load) ≤ 5 % THD (Non-linear Load)		
Transfer Time	AC Mode to Batt. Mode	Zero		
	Inverter to Bypass	Zero		
Waveform (Batt. Mode)		Pure Sinewave		
EFFICIENCY				
AC Mode		90.5%	91.0%	91%
ECO Mode			96%	
Battery Mode		86%	87%	87%
BATTERY				
Standard Model	Battery Type	12 V / 9 Ah		
	Numbers	20 pcs (18-20 adjustable)**	20 pcs (18-20 adjustable)** x 2 strings	20pcs (18-20 adjustable)** x 2 strings
	Typical Recharge Time	9 hours recover to 90% capacity		
	Charging Current (max.)	1A	2A	2A
	Charging Voltage	273 VDC ± 1%		
Long-run Model	Battery Type	Depending on the capacity of external batteries		
	Numbers			
	Charging Current (max.)	4A	4A	4A
	Charging Voltage	273 VDC ± 1%		
INDICATORS				
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions		
ALARM				
Battery Mode		Sounding every 4 seconds		
Low Battery		Sounding every second		
Overload		Sounding twice every second		
Fault		Continuously sounding		
PHYSICAL				
Standard Model	Dimension, D x W x H (mm)	UPS: 668x438x266 [6U] Battery pack : 580x438x133 [3U]	UPS: 668 x 438 x 266 [6U] Battery pack : 580x438x133 [3U] x 2 pcs	UPS: 668 x 438 x 266 [6U] Battery pack : 580 x 438 x 133[3U] x 2 pcs
	Net Weight (kgs)	UPS unit: 42 Battery pack: 63	UPS unit: 45 Battery pack: 63 x 2 pcs	UPS unit: 45 Battery pack: 63 x 2 pcs
Long-run Model	Dimension, D x W x H (mm)	668 x 438 x 266 [6U]	668 x 438 x 266 [6U]	668 x 438 x 266 [6U]
	Net Weight (kgs)	42	45	45
ENVIRONMENT				
Operating Humidity		0-95 % RH @ 0- 40°C (Non-condensing)		
Noise Level		Less than 60dB @ 1 Meter	Less than 65dB @ 1 Meter	
MANAGEMENT				
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC		
Optional SNMP		Power management from SNMP manager and web browser		

* L means long-run model

**When using internal batteries from 18-19, the unit will de-rate according to below formula: P = P_{Rating} x N/20.
Product specifications are subject to change without further notice.

Galleon II 3P/3P



10K(L)/15K(L)/20K(L)/30K(L)/40K(L)/60KL/80KL LCD Panel



100KL/120KL/160KL/200KL 10" LCD Panel

• DSP technology guarantees high reliability

A Digital Signal Processor (DSP) technology digitizes the data and mathematically manipulates them to provide an improved solution with higher performance.

• Output power factor 1 (Only for 10K-80K)

For critical applications, this 3-phase online UPS with output power factor 1.0 ensures higher efficiency and advanced performance.
* Power Factor 0.9 only for 100K-200K models

• Active power factor correction in all phases

Power factor correction is active in all phases and it can improve the efficiency of input.

• Dual Inputs

Galleon II 33 series is also available for optional dual inputs to support various inputs to have flexibility for system configuration.

• 50Hz/60Hz frequency converter mode

Lock output frequency at 50Hz or 60Hz to suit power sensitive equipments.

• ECO mode operation for energy saving

ECO mode improves the efficiency up to 98% to cut energy usage & cost. In this mode, loads are supplied by the mains directly. While mains failure, the UPS will constantly supply the power to the connected device without any interruption.

• Emergency power off function (EPO)

In case of any emergency and fire, the EPO control mechanism can instantly shut down the system.

• Adjustable charging current

Users can adjust charging current via LCD setting based on applications.

• Very powerful charger

Galleon II 33 series is built-in 12A charger for 10K-40KVA models and 24A for 60K/80KVA models. It's to support very long runtime applications when connecting to big capacity of external battery cabinet.

• Optional parallel operation with common battery

The system can be operated in parallel, increasing the capacity and performance. Besides, this parallel UPS system can share common battery packs which might greatly reduce the expense and reach the same performance.

Model	Galleon II 33 10K-80K	Galleon II 33 100K-200K
Max. parallel units	3	2

• High overload capability

Supporting 110% overload capacity for 60 min and up to 1 min overload condition at 150% load.

• Adjustable battery design

The number of connected batteries can be adjusted flexibly based on different power demands. This feature can allow UPS to keep running even when some battery packs are damaged.

• Optional 4.3" touch LCD for Galleon II 33 10K-80K models



Galleon II 3-phase in/3-phase out Online UPS Selection Guide

MODEL		10K (L)*	15K(L)	20K (L)*	30K (L)*	40K (L)	60KL	80KL	100KL	120KL	160KL	200KL
PHASE		3-phase in / 3-phase out										
CAPACITY		10KVA / 10KW	15KVA / 15KW	20KVA / 20KW	30KVA / 30KW	40KV / 40KW	60KVA / 60KW	80KVA / 80KW	100KVA / 90KW	120KVA / 108KW	160KVA / 144KW	200KVA / 180KW
PARALLEL CAPABILITY		up to 3 units in parallel							up to 2 units in parallel			
INPUT												
Nominal Voltage		3 x 400 VAC (3Ph+N)										
Voltage Range		190-520 VAC (3-phase) @ 50% load 305-478 VAC (3-phase) @ 100% load							208-478 VAC (3-phase) @ 70% load 305-478 VAC (3-phase) @ 100% load			
Frequency Range		46~54 Hz or 56~64Hz							40~70Hz			
Power Factor		≥ 0.99 @ 100% Load										
OUTPUT												
Output Voltage		3 x 360*/380/400/415 VAC (3Ph+N)							3 x 380/400/415 VAC (3Ph+N)			
AC Voltage Regulation (Batt. Mode)		± 1%										
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz										
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz										
Current Crest Ratio		3:1 (max.)										
Harmonic Distortion		≤ 2 % THD (Linear Load) ; ≤ 5 % THD (Non-linear Load)							≤ 2 % THD (Linear Load) ; ≤ 4 % THD (Non-linear Load)			
Transfer Time	AC Mode to Batt. Mode	Zero										
	Inverter to Bypass	Zero										
Waveform (Batt. Mode)		Pure Sine wave										
Overload	AC Mode	100-110% for 60 min, 110-125% for 10 min, >150% immediately							105-110% for 1 hr, 111-125% for 10 min, 126-150% for 1 min, >150% for 200ms			
	Battery Mode	100-110% for 60 min, 110-125% for 10 min, >150% immediately							105-110% for 1 hr, 111-125% for 10 min, 126-150% for 1 min, >150% for 200ms			
EFFICIENCY												
AC Mode		95.5%							94.0%			
ECO Mode		98.5%							98.0%			
Battery Mode		94.5%							93.0%			
BATTERY												
Standard Model	Battery Type	12 V/7 Ah	12 V/9 Ah	12 V/9 Ah	12 V/7 Ah	12 V/9 Ah	N/A					
	Numbers	(10+10) pcs	(16+16) pcs	(16+16) pcs	(16+16) pcs x 2 strings							
	Typical Recharge Time	9 hours recover to 90% capacity										
	Charging Current (max.)	1A ~ 12A (Adjustable)										
	Charging Voltage	+/- 136.5 VDC ± 10%	+/-218 VDC ± 10%									
Long-run Model	Battery Type	Depending on the applications										
	Numbers	20 pcs	32~40 pcs (Adjustable)									
	Charging Current (max.)	1A ~ 12A (Adjustable)					2A ~ 24 A (Adjustable)		24A	32A	40A	48A
	Charging Voltage	+/- 136.5 VDC ± 10%	+/- 13.65V x N (N=16~20)					+/- 13.7V x N (N = 16~20)				
INDICATORS												
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions							10" Touch Type color LCD			
PHYSICAL												
Standard Model	Dimension,DxWxH (mm)	626 x 250 x 750			815 x 300 x 1000		N/A					
	Net Weight (kgs)	124	139		225	250						
Long-run Model	Dimension,DxWxH (mm)	626 x 250 x 750			815 x 300 x 1000		790 x 360 x 1010		940 x 567 x 1015		1040 x 567 x 1452	
	Net Weight (kgs)	28	43		60	61	108	113	194	229	306	340
ENVIRONMENT												
Operation Temperature		0-40°C										
Operation Humidity		< 95% and non-condensing										
Noise Level		Less than 55dB @ 1 Meter	Less than 58dB @1 Meter		Less than 65dB @1 Meter		Less than 70dB@ 1 Meter		Less than 75dB@1 Meter	Less than 70dB @ 1 Meter		Less than 73dB @ 1 Meter
MANAGEMENT												
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC										
Optional SNMP		Power management from SNMP manager and web browser										

*If output voltage is set as 3 x 360VAC, the output power of the unit will be de-rated to 90%.
Product specifications are subject to change without further notice.

Giant Elite 1P/1P



Giant Elite 11 6K/7.5K/10K Giant Elite 11 6KL/7.5KL/10KL

- Galvanic isolation design to withstand all kinds of loads
- Output power factor 0.8
- Fully coating PCBAs to withstand harsh environment
- Unique ventilation design for effective heat dissipation
- Wide input voltage and frequency range to withstand robust environment
- High short-circuit and overload capabilities
- Built-in maintenance bypass switch

Giant Elite 1-phase in/1-phase out Online UPS Selection Guide

MODEL		Giant Elite 6K(L)			Giant Elite 7.5K(L)		Giant Elite 10K(L)	
PHASE		Single phase with ground						
CAPACITY*		6KVA/4.8KW			7.5KVA/6KW		10KVA/8KW	
INPUT								
Nominal Voltage		208VAC/220VAC/230VAC						
Voltage Range		165VAC ~ 285VAC @ 16 pcs of batteries ; 185VAC ~ 285VAC @ 18 pcs of batteries						
Frequency		40 Hz ~ 55 Hz @ 50Hz system ; 56 Hz ~ 64 Hz @ 60Hz system						
OUTPUT								
Output Voltage		208VAC/220VAC/230VAC						
Voltage Regulation		± 1%						
Frequency Range (Synchronized Range)		45Hz ~ 55 Hz or 56 Hz ~ 64 Hz						
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz						
Current Crest Ratio		3:1						
Harmonic Distortion		≤ 3 % THD (Linear Load) ; ≤ 5 % THD (Non-linear Load)						
Transfer Time	AC to DC	Zero						
	Inverter to Bypass	Zero						
Waveform (Batt. Mode)		Pure Sinewave						
EFFICIENCY								
AC Mode		88.3%						
Battery Mode		92%						
BATTERY								
Standard Model	Battery Type	12V / 9Ah						
	Battery Numbers**	16 pcs						
	Recharging Time	6 hours recover to 90% capacity						
	Charging Current (max.)	2A						
	Charging Voltage	218.4 V ± 1%						
Long-run Model	Battery Type	Depending on the applications						
	Numbers	16 pcs	18 pcs	16 pcs	18 pcs	16 pcs	18 pcs	
	Charging Current (max.)	Default : 8 A; 2A/4A/8A(Adjustable)						
	Charging Voltage	218.4 V ± 1%	245.7 V ± 1%	218.4 V ± 1%	245.7 V ± 1%	218.4 V ± 1%	245.7 V ± 1%	
INDICATORS								
LCD		UPS status, load level, battery level, input/output voltage and frequency, fault code/warning code						
ALARM								
Battery Mode		Sounding every 4 seconds						
Low Battery		Sounding every second						
Overload		Sounding twice every second						
Fault		Continuously sounding						
PHYSICAL								
Standard Model	Dimensions, DxWxH (mm)	562 x 300 x 826						
	Net Weight (Kgs)	106	114	122	130	130	138	
Long-run Model	Dimensions, DxWxH (mm)	592 x 250 x 826						
	Net Weight (Kgs)	62		78		86		
ENVIRONMENT								
Operating Temperature		0 ~ 50°C (battery life cycle will be shorten when temperature is above 25°C)						
Operating Humidity		< 95 % and non-condensing						
Noise Level		Less than 60dBA @ 1 Meter						
MANAGEMENT								
Smart RS-232/USB		Supports Windows 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix, and MAC						
Dry Contact		Five signals: AC failure, low battery, UPS alarm, bypass and UPS fault						
Optional SNMP		Power management from SNMP manager and web browser						

* Derate capacity to 90% of capacity when the output voltage is adjusted to 208VAC.

**Battery number is set in factory and can't be changed by users.

Product specifications are subject to change without further notice.

Giant Elite 3P/1P



- Galvanic isolation design to withstand all kinds of loads
- Output power factor 0.8
- Fully coating PCBAs to withstand harsh environment
- Unique ventilation design for effective heat dissipation
- Wide input voltage and frequency range to withstand robust environment
- High short-circuit and overload capabilities
- Built-in maintenance bypass switch

Giant Elite 3-phase in/1-phase out Online UPS Selection Guide

MODEL		Giant Elite 31-6K(L)		Giant Elite 31-7.5K(L)		Giant Elite 31-10K(L)	
PHASE				3-phase in / 1-phase out			
CAPACITY*		6KVA/4.8KW		7.5KVA/6KW		10KVA/8KW	
INPUT							
Nominal Voltage		3 x 360VAC/380VAC/400VAC (3Ph + N + G)					
Voltage Range		286VAC ~ 493VAC @ 16 pcs of batteries ; 320VAC ~ 493VAC @ 18 pcs of batteries					
Frequency		40 Hz ~ 55 Hz @ 50Hz system ; 56 Hz ~ 64 Hz @ 60Hz system					
OUTPUT							
Output Voltage		208VAC/220VAC/230VAC (Selectable)					
Voltage Regulation		± 1%					
Frequency Range (Synchronized Range)		45Hz ~ 55 Hz or 56 Hz ~ 64 Hz					
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz					
Current Crest Ratio		3:1					
Harmonic Distortion		≤ 3 % THD (Linear Load) ; ≤ 5 % THD (Non-linear Load)					
Transfer Time	AC to DC	Zero					
	Inverter to Bypass	Zero					
Waveform (Batt. Mode)		Pure Sinewave					
EFFICIENCY							
AC Mode		83%					
Battery Mode		92%					
BATTERY							
Standard Model	Battery Type	12V / 9Ah					
	Battery Numbers**	16 pcs					
	Recharging Time	6 hours recover to 90% capacity					
	Charging Current (max.)	2A					
	Charging Voltage	218.4 V ± 1%					
Long-run Model	Battery Type	Depending on the applications					
	Numbers	16 pcs	18 pcs	16 pcs	18 pcs	16 pcs	18 pcs
	Charging Current (max.)	Default : 8 A; 2A/4A/8A(Adjustable)					
	Charging Voltage	218.4 V ± 1%	245.7 V ± 1%	218.4 V ± 1%	245.7 V ± 1%	218.4 V ± 1%	245.7 V ± 1%
INDICATORS							
LCD		UPS status, load level, battery level, input/output voltage and frequency, fault code/warning code					
ALARM							
Battery Mode		Sounding every 4 seconds					
Low Battery		Sounding every second					
Overload		Sounding twice every second					
Fault		Continuously sounding					
PHYSICAL							
Standard Model	Dimensions, DxWxH (mm)	592 x 300 x 826	592 x 360 x 826	592 x 300 x 826	592 x 360 x 826	592 x 300 x 826	592 x 360 x 826
	Net Weight (Kgs)	129	137	152	160	160	168
Long-run Model	Dimensions, DxWxH (mm)	592 x 300 x 826					
	Net Weight (Kgs)	84		107		115	
ENVIRONMENT							
Operating Temperature		0 ~ 50°C (battery life cycle will be shorten when temperature is above 25°C)					
Operating Humidity		< 95 % and non-condensing					
Noise Level		Less than 60dBA @ 1 Meter					
MANAGEMENT							
Smart RS-232/USB		Supports Windows 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix, and MAC					
Optional SNMP		Power management from SNMP manager and web browser					

* Derate capacity to 90% of capacity when the output voltage is adjusted to 208VAC.

**Battery number is set in factory and can't be changed by users.

Product specifications are subject to change without further notice.

Giant Elite 3P/3P



- DSP technology guarantees high reliability
- Galvanic isolation design to withstand all kinds of loads
- Output power factor 0.8
- Fully coating PCBAs to withstand harsh environment
- Unique ventilation design for effective heat dissipation
- Adjustable battery numbers
- Reverse phase frequency operation and supports non-neutral input
- Supporting heavy duty equipment, half-wave type of load

Giant Elite 3-phase in/3-phase out Online UPS Selection Guide

MODEL		Giant Elite 3/3 20K		Giant Elite 3/3 40K	
PHASE		3-phase in/3-phase out			
CAPACITY		20KVA/16KW		40KVA/32KW	
INPUT					
Nominal Voltage		3 x 380VAC (3Ph + G or 3Ph + N + G)			
Acceptable Voltage Range		165VAC ~ 280VAC (Ph-N) ; 285VAC ~ 485VAC (Ph-Ph)			
Frequency		50 Hz ± 5 Hz or 60 Hz ± 5 Hz			
INVERTER					
Nominal Voltage		3 x 220VAC/230VAC/240VAC (3Ph + N + G)			
Waveform		Pure Sinewave			
Output Voltage	Steady state	±1%			
Stability	Transient state	±5%			
Frequency		50 Hz / 60 Hz			
Frequency Stability		± 1%			
Frequency Synchronisation Range		± 5Hz (Equal to bypass working range)			
Frequency Synchronisation Speed		1~2 Hz/s			
Power Factor		0.8			
Crest Factor		3:1			
Total Harmonic Distortion (THDv)		< 2% (Linear Load) ; < 4% (Non-linear Load)			
Dynamic in-rush Voltage Range		0%~>100%~>0% (R Load) <±5% ; 20%~>100%~>20% (R Load) ±3%			
Dynamic Recovery Time (III Grade)		0%~100% RCD load ; <60 ms recover to 90% of nominal voltage			
Transfer Time		0 ms			
Overload Capability		0% ~ 110% continuous running; 110% ~ 150% for 10 min~1 min; >160% for 200ms			
Short-circuit Capability		60~100ms			
Transient Response Time		< 5ms			
BYPASS					
Connection Type		Hardwire 5-wire (3Ph+N+G)			
Input Voltage Range		176VAC ~ 264VAC (Ph-N) ; 304VAC ~ 456VAC (Ph-Ph)			
Overload/Short-circuit Capability		1.5 In~1.8 In 1h~30s			
		1.8 In ~ >2.0 In 30s~200ms			
SYSTEM					
Efficiency	Line Mode	90%		91%	
	Battery Mode	91%		92%	
ECO Mode (Non-parallel models)		Yes			
EPO Function		Yes			
BATTERY & CHARGER					
Rectifier	Type	6 pulse			
	Rated output voltage	384 VDC			
	Charger voltage	395 VDC ~ 435 VDC (adjustable)			
	Charging current	Maximum=Capacity (KW)/Battery voltage (real-time) *The maximum current is never higher than 40A.		Maximum 40A, 5A @ full load	
Battery	Type	Support VRLA Battery			
	Numbers	32 pcs (29 ~ 32 adjustable)			
	Cold Start	Yes			
PHYSICAL					
IP Protection		IP20			
Dimensions, D x W x H (mm)		557 x 360 x 898		680 x 450 x 1130	
Net Weight (Kgs)		180		275	
ENVIRONMENT					
Operating Temperature		0~ 35°C continuous running, 40°C 8-hour running at nomina input voltage, recharging batteries and no overload, 45°C derating to 85% with linear load			
Operating Humidity		0~90% (non-condensing)			
MANAGEMENT					
Modbus RS-232/RS485		Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC			
Dry Contacts		6 outputs and 2 inputs			
Optional SNMP		Power management from SNMP manager and web browser			

Product specifications are subject to change without further notice.

Giant 3P/1P



- Online double-conversion
- DSP technology guarantees high reliability
- True galvanic isolation transformer design
- Control designed to withstand all kinds of loads
- Independent ventilation enhance durable operation under harsh environment
- Adjustable battery numbers
- Accept dual-mains input
- Parallel operation with up to 4 units (option)
- Variety of communication options available
- Reverse phase sequence operation and No neutral operation

Giant 3P/1P 384VDC (220VDC Option) Online UPS Selection Guide

MODEL	Giant 31-10K	Giant 31-15K	Giant 31-20K	Giant 31-30K	Giant 31-40K
CAPACITY	10 KVA / 8 KW	15 KVA / 12 KW	20 KVA / 16 KW	30 KVA / 24 KW	40 KVA / 32 KW
INPUT					
Nominal Voltage	3 x 380VAC/400VAC (3Ph + N or 3Ph + N + G)				
Acceptable Voltage Range	285VAC ~ 475VAC				
Frequency	50Hz/60Hz ±5 Hz (±10%)				
INVERTER					
Nominal Voltage	220VAC/230VAC/240VAC (Adjustable)				
Waveform	Pure Sinewave				
Output Voltage Stability	Steady state	±1%			
	Transient state	±5%			
Frequency	50 Hz / 60 Hz				
Frequency Stability	± 1%				
Frequency Synchronisation Range	± 5Hz (Equal to bypass working range)				
Frequency Synchronisation Speed	1~2 Hz/s				
Power Factor	0.8				
Crest Factor	3:1				
Total Harmonic Distortion (THDv)	< 2% (Linear Load) ; < 5% (Non-linear Load)				
Dynamic in-rush Voltage Range	0%~>100%~>0% (R Load) <±5% ; 20%~>100%~>20% (R Load) ±3%				
Dynamic Recovery Time (III Grade)	0%~100% RCD load ; <60 ms recover to 90% of nominal voltage				
Transfer Time	0 ms				
Overload Capability	0% ~ 110% continuous running; 110% ~ 150% for 10 min~1 min; >160% for 200ms				
Short-circuit Capability	60~100ms				
Transient Response Time	< 5ms				
BYPASS					
Connection Type	Hardwire 3-wire (1Ph+N+G)				
Input Voltage Range	220VAC ± 25%				
Overload Capability/Short-circuit Capability	1.5 In~1.8 In 1h~30s				
	1.8 In ~ >2.0 In 30s~200ms				
SYSTEM					
Efficiency (@ linear load)	≥ 90%				
ECO Mode (Non-parallel models)	Yes				
EPO Function	Yes				
Standard	IEC 61000-4-5 Protection surge, IEC 62040-2 EMC/EMI, IEC62040-1 Safety				
BATTERY & CHARGER					
Rectifier	Type	6 pulse			
	Rated output voltage	384 VDC			
	Charger voltage	190VDC ~ 435VDC (Adjustable)			
	Charging current(max)	Default 10A, Maximum=Capacity/Battery Voltage		Default 10A, Maximum 40A, 5A@Full load	
Battery	Type	Support VRLA Battery			
	Numbers	32 pcs (29 ~ 32 adjustable)			
	Cold Start	Yes			
PHYSICAL					
IP Protection	IP20 (Default), IP21/IP31 (Option)				
Dimensions, D x W x H (mm)	656 x 405 x 817				821 x 432 x 1159
Net Weight (Kgs)	118	120	145	193	278
ENVIRONMENT					
Operating Temperature	0~ 35°C continuous running, 40°C 8-hour running at nomina linput voltage, recharging batteries and no overload, 45°C derating to 85% with linear load				
Operating Humidity	0~90% (non-condensing)				
Noise Level	Less than 70dB @ 1 Meter				
MANAGEMENT					
Modbus RS-232/RS485	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC				
Dry Contacts	6 outputs and 2 inputs				
Optional SNMP	Power management from SNMP manager and web browser				

Product specifications are subject to change without further notice.

Giant 3P/3P



- Online double-conversion
- DSP technology guarantees high reliability
- True galvanic isolation transformer design
- Control designed to withstand all kinds of loads
- Intelligent battery management to prolong battery lifecycle
- Independent ventilation enhance durable operation under harsh environment
- Adjustable battery numbers
- Accept dual-mains input
- Parallel operation with up to 4 units (option)
- Varieties of communication options available
- Optional 7" touch LCD
- Reverse phase frequency operation and supports non-neutral input

Giant 3-phase in/3-phase out Online UPS Selection Guide

MODEL	Giant 10K	Giant 15K	Giant 20K	Giant 30K	Giant 40K	Giant 60K	Giant 80K	Giant 100K	Giant 120K	Giant 160K	Giant 200K
CAPACITY	10 KVA / 8 KW	15KVA / 12KW	20 KVA / 16 KW	30 KVA / 24 KW	40 KVA / 32 KW	60 KVA / 48 KW	80 KVA / 64 KW	100 KVA / 80 KW	120 KVA / 96KW	160 KVA / 128KW	200 KVA / 160KW
INPUT											
Nominal Voltage	3 x 380VAC/400VAC (3Ph + N)										
Acceptable Voltage Range	285VAC ~ 475VAC										
Frequency	50/60 Hz ± 10 %										
INVERTER											
Nominal Voltage	3 x 380VAC/400VAC (3Ph + N)										
Precision	Stationary: ±1% Transitory: ±5% (load variations 100-0-100%)										
Frequency	50/60 Hz synchronised ±1 % With mains absent ±0.1 Hz										
Max. Synchronization Speed	±1 Hz/s										
Waveform	Pure Sinewave										
Total Harmonic Distortion (THDv)	<2% (Linear Load) ; <5% (Non-linear Load)										
Phase Displacement	120° ±1% (balanced load) ; 120° ±2% (imbalances 50% of the load)										
Dynamic Recovery Time	3 cycles at 90 % of the static value										
Admissible Overload	110% for 10min; 150% for 60sec ; >160% for 200ms										
Admissible Crest Factor	3:1										
Admissible Power Factor	0.6~1 (inductive or capacitive)										
Imbalance Output Voltage @ 100% Unbalanced Load	<1%										
Current Limit	High overload, short-circuit: RMS Voltage Limit High Crest-Factor current: Peak Voltage Limit										
STATIC BYPASS											
Type	Solid state										
Voltage	3 x 380VAC/400VAC (3Ph + N)										
Frequency	50/60 Hz										
Activation Criterion	Microprocessor control										
Transfer Time	Zero										
Admissible Overload	150% for 1 hour; 180% for 30sec; >200% for 200ms										
Transfer to Bypass	Immediate, for overloads above 160%										
Retransfer	Automatic after alarm clear										
MAINTENANCE BYPASS											
Type	Without interruption										
Voltage	3 x 400V (3Ph + N)										
Frequency	50/60 Hz										
Overall Efficiency	Line Mode	89%		90%		91%			92%		
	Battery Mode	90%		91%		92%			93%		
BATTERY & CHARGER											
Battery Type and Numbers	12VDC x 32 pcs (29~32 pcs adjustable)										
Nominal Battery Voltage	384 VDC (Based on 32pcs batteries)										
Charging Method	CC/CV										
Precision	±1%										
Charging Current	Default 10A, *Maximum= Capacity(KW)/Battery (real-time).				Default 10A; Maximum 40A; 5A@ full load						
Charging Voltage	432 VDC (Based on 32pcs batteries)										
PHYSICAL											
Dimensions, D x W x H (mm)	656 x 405 x 817			656 x 405 x 941	821 x 432 x 1159		975 x 554 x 1286		975 x 554 x 1326	1051 x 705 x 1646	
Net Weight (Kgs)	118	120	145	193	278	365	471	573	650	760	840

* The maximum current is never higher than 40A.
Product specifications are subject to change without further notice.

Arena



This LCD display shows all information of each power module. It also can be set to display information of whole customized system.

• True double-conversion

Arena series is applied online double conversion technology to effectively insulate against network disturbances and enable higher load uptime.

• Modular connector box with hot-swappable design for ease of power expansion, installation and maintenance

Arena is applied patented modular design to enhance the flexibility of power expansion and maintenance. By simply removing four screws on the connector box, power module can be easily removed out from cabinet without disconnecting all wires. It also simplifies the process of maintenance and replacement to reduce the maintenance cost effectively.



• Standard 19" form factor with tower/rack convertible design

Designed for easy adjustment, the vertical/horizontal conversion design enhances the flexibility and scalability of the modular UPS. 19" form factor suits for the standard rack so it optimizes cost expense to meet the power demands.



• Parallel operation with common battery

Compared to general parallel system, multiple Arena UPSs can form a parallel power backup system by sharing common battery packs which might greatly reduce the expense and reach the same performance.

• Adjustable battery design

The number of connected batteries can be adjusted flexibly based on different power demands.

• DSP technology guarantees high reliability

A Digital Signal Processor (DSP) technology digitizes the data and mathematically manipulates them to provide an improved solution with higher performance.

• Output power factor 1.0

For critical applications, the modular UPS with output power factor 1.0 ensures higher efficiency and advanced performance.

• 50Hz/60Hz frequency converter mode

Lock output frequency at 50Hz or 60Hz to suit power sensitive equipments.

• ECO mode operation for energy saving

ECO mode improves the efficiency up to 97% to cut energy usage & cost. In this mode, loads are supplied by the mains directly. While mains failure, the UPS will constantly supply the power to the connected device without any interruption.

• Emergency power off function (EPO)

In case of any emergency and fire, the EPO control mechanism can instantly shut down the system.

• Generator compatible

This UPS can accept generator as power source and still convert perfect power to the connected loads.

• Customized system

Multiple Arena UPSs can easily form a complete system based on customer's demand. Please contact sales directly for the details.



Customized system			
Cabinet Height	17U		
Number of power module	4	2	1
Number of battery module	0	2	3

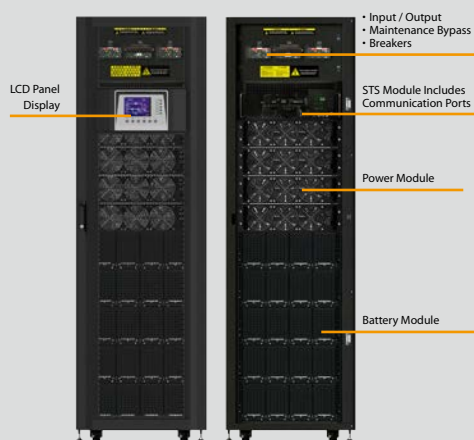
*This customized system will be embedded 1U centralized communication unit.

Arena Online UPS Selection Guide

MODEL		Arena 3/3-10K	Arena 3/1-10K	Arena 1/1-10K	Arena 2/2-6K LV	Arena 3/3-10K LV
PHASE		3 phase in / 3 phase out	3 phase in / 1 phase out	1 phase in / 1 phase out	2 phase in / 2 phase out	3 phase in / 3 phase out
CAPACITY		10000 VA / 10000 W	10000 VA / 10000 W	10000 VA / 10000 W	6000 VA / 6000 W	10000 VA / 8000 W
PARALLEL CAPABILITY		10	10	10	10	10
INPUT						
Nominal Voltage		3 x 360VAC/380VAC/ 400VAC/415VAC (3Ph+N+PE)	3 x 360VAC/380VAC/ 400VAC/415VAC (3Ph+N+PE)	208VAC/220VAC/230VAC /240VAC (1Ph+N+PE)	100/200, 110/220, 120/208, 120/240, 127/220 VAC (2P+N+PE)	3 x173VAC/190VAC/200VAC /208/220VAC (3Ph+N+PE)
Voltage Range		190-520 VAC (3-phase) @ 50% load 305-478 VAC (3-phase) @ 100% load		110-300 VAC @ 50% load 176-276 VAC @ 100% load	88-155 VAC (L-N) 152- 269 VAC (L-L)	88-155 VAC (L-N) 152- 269 VAC (L-L)
Frequency Range		40 Hz ~ 70 Hz				
Power Factor		≥ 0.99 @ 100% load				
THDi		< 4% @ full linear load				
OUTPUT						
Output Voltage		360VAC/380VAC/400VAC/ 415VAC (3Ph+N)	208*/220/230/240VAC (L+N)	208*/220/230/240VAC (L+N)	100/200, 110/220, 120/208, 120/240, 127/220 VAC (2Ph+N)	173VAC/190VAC/200VAC (L+N)
AC Voltage Regulation (Batt. Mode)		± 1%				
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz				
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz				
Current Crest Ratio		3:1 (max.)				
Harmonic Distortion		≤ 2% THD (Linear Load) ; ≤ 3% THD (Non-linear Load)				
Transfer Time	AC Mode to Batt. Mode	zero				
	Inverter to Bypass	zero				
Waveform (Batt. Mode)		Pure Sinewave				
EFFICIENCY						
AC Mode		94%	94%	93.5%	91%	92%
ECO Mode		97%	97%	97%	97%	97%
Battery Mode	At Full Load	93%	92.5%	92%	91%	92%
	Peak	93.5%	93%	92.5%	91.5%	92%
BATTERY CHARGER						
Battery Voltage		± 12V / 9 Ah				
Battery Numbers		16 ~ 20 pcs (adjustable) x 2	16 ~ 20 pcs (adjustable) x 2	16 ~ 20 pcs (adjustable) x 2	8~10pcs (adjustable) x 2	8~10pcs (adjustable) x 2
Nominal Voltage		+/-192V (12V x 32 pcs)	+/-192V (12V x 32 pcs)	+/-192V (12V x 32 pcs)	+/-96V (12V x 16 pcs)	+/-96V (12V x 16 pcs)
Maximum Voltage		+/- 240V (12V x 40 pcs)	+/- 240V (12V x 40 pcs)	+/- 240V (12V x 40 pcs)	+/-120V (12V x 20pcs)	+/-120V (12V x 20pcs)
Minimum Voltage		+/-192V (12V x 32 pcs)	+/-192V (12V x 32 pcs)	+/-192V (12V x 32 pcs)	+/-96V (12V x 16pcs)	+/-96V (12V x 16pcs)
Charging Voltage		± 218V	± 218V	± 218V	± 109V	± 109V
Typical Recharging Time		9 hours recover to 90% capacity				
Charging Current		± 4A				
INDICATORS						
LCD/LED Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions				
PHYSICAL						
Dimension, D x W x H(mm)		678 x 418 x 129 [3U]				
Net Weight (kgs)		20.5	20.5	20.5	17.6	21
ENVIRONMENT						
Operating Humidity		0-95 % RH @ 0- 40°C (non-condensing)				
Noise Level		Less than 55dB @ 1 Meter	Less than 55dB @ 1 Meter	Less than 55dB @ 1 Meter	Less than 58dB @ 1 Meter	Less than 58dB @ 1 Meter
MANAGEMENT						
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC				
Optional SNMP		Power management from SNMP manager and web browser				

*Derate capacity to 90% of capacity when the output voltage is adjusted to 208VAC.
Product specifications are subject to change without further notice

+Power Modular UPS



• High efficiency online double conversion technology

+Power is applied with online double conversion technology to reach its high performance over 94.5% at 50% load. It significantly reduces overall Total Cost of Ownership (TCO).

• High scalability

DSP control provides an improved solution with high performance. Integrated with modular design and parallel technology, +Power simplifies future power expansion.

• Unity output power factor

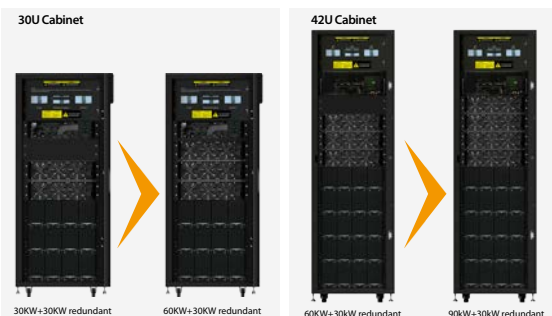
+Power delivers unity output power ($kVA=kW$) providing the maximum power capacity to mission critical loads. It satisfies the requirements of the latest servers and optimizes IT investment with every penny.

• Modular design lowers MTTR

Modular design is applied in power module, STS module and battery module. It will simplify maintenance and replacement with low MTTR (Mean Time To Repair).

• N+1 or N+X parallel redundancy for power guarantee

Scalable architecture allows you to optimize cost expense to meet power demands by vertically expanding in a single rack enclosure from 30KVA to 210KVA and achieve N+1 or N+X redundancy in the same rack. Supporting up to 420Kva system with 210Kva x2 in parallel operation



• Ease of installation and maintenance

Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance. Besides, to facilitate installation and maintenance, all panel control and connectors are front accessibility.

• Flexible battery configuration adapts different applications

Battery numbers can be adjusted flexibly. It will adapt different power demands and shorten system downtime. Battery voltage can be set from 32 to 40 pieces per string.

• Highly reliable operation with redundant power supply in STS

+Power provides 2 power supplies in STS, ensuring no risk of shutdown.

• User-adjustable charging current

+Power provides maximum 8A or 6A charging current for every power module and it's user-adjustable based on requirement.

• High overload capability

+Power supports, 110% overload for 60 minutes, 125% for 10 minutes, and 150% for 1 minute.

• Graphic 5.7" LCD design for easy management

Designed for easy management, the intuitive design of 5.7" graphic LCD display enhances the readability of identified and advanced configuration.

• Optional 10" touch LCD panel



+Power 3P/3P 400V Modular UPS Selection Guide

MODEL	+Power 30U-90HV	+Power 42U-120HV	+Power 30U-120HV +Power 30U-80-20KHV	+Power 30U-180HV +Power 30U-120-20KHV	+Power 42U-200-20KHV	+Power 42U-210HV	+Power 42U-300HV
PHASE	3-phase in / 3-phase out						
CABINET CAPACITY*	90 KW	120 KW	120 KW or 80 KW	180 KW or 120 KW	200 KW	210 KW	300 KW
BATTERY TYPE	Built-in Battery		External Battery				
ONE POWER MODULE CAPACITY	30KVA / 30KW		30KVA / 30KW or 20KVA / 20KW		20KW	30KVA / 30KW	30KVA / 30KW
MAX. POWER MODULE NO.	3	4	4	6	10	8	10
MAX. BATTERY SET NO.**	3	5	-	-	-	-	-
INPUT							
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)						
Voltage Range	305 ~ 478 VAC at 100% load; 208 ~ 304VAC at <70% load						
Nominal Frequency	50/60Hz (Auto Sensing)						
Frequency Range	40Hz ~70Hz						
Power Factor	> 0.99 @ 100% Load , >0.98 @ 50% Load						
Harmonic Distortion (THDi)	< 3% @ 100% load						
OUTPUT							
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)						
Voltage Regulation(Steady state)	≤± 1% Typical (balanced load) ; ≤ ± 2% Typical (imbalanced load)						
Nominal Frequency	50/60Hz						
Frequency Range(Synchronized)	46Hz ~ 54Hz or 56Hz ~ 64Hz						
Overload Capability	1 hour for 110%, 10 mins for 125%,; 1 min for 150%, 200ms for >150%						
Harmonic Distortion	≤ 2% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)						
Efficiency	Up to 94.5%						
BATTERY / CHARGER							
Nominal Voltage	+/- 216V (12V x 36 pcs)						
Maximum Voltage	+/- 240V (12V x 40 pcs)						
Minimum Voltage	+/- 192V (12V x 32 pcs)						
Float Charging Voltage	2.25V / Cell						
Boost Charging Voltage	2.35V / Cell						
Temperature Compensation	Yes						
Maximum Charging Current (Per Power Module)	8A	8A for 30KW power module 6A for 20KW power module		6A	8A		
PHYSICAL							
Cabinet Dimension (D x W x H) mm	1100 x 600 x 1475	1100 x 600 x 2010	1100 x 600 x 1475	1100 x 600 x 1475	1100 x 600 x 2010		
Net Weight (Kg)	675	932	335 or 333	437.5 or 434.5	611	549	620
ENVIRONMENT							
Operating Temperature	0 ~ 40°C						
Relative Humidity	0 ~ 95% non-condensing						
Altitude	<1000m for Nominal power						
IP Class	IP 20						
MANAGEMENT							
Smart RS-232 / USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC						
Optional SNMP	Power management from SNMP manager and web browser						
STANDARDS							
Safety	IEC/EN 60950-1; IEC/EN 62040-1						
EMC	IEC/EN 62040-2 Category C3						

*When temperature is above 30°C, the output power factor will be de-rated, 0.9 at 31°C ~35°C and 0.8 at 36°C ~40°C.

** One battery module contains 10 pcs of 12V/7Ah or 12/9Ah sealed lead acid batteries in one tray. One complete battery set contains 4 battery modules.

***If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

Product specifications are subject to change without further notice.



Model	Description	Dimension DxWxH(mm)	Weight (kg)
PM-20HV	3P/3P 20KVA / 20KW power module	650 x 440 x 132(3U)	34
PM-30HV	3P/3P 30KVA / 30KW power module	650 x 440 x 132(3U)	34.5
Battery Module	10 pcs of 12V 9Ah batteries	735 x 107 x 155	26

+Power 3P/3P 208V Modular UPS Selection Guide

MODEL	+Power 30U-60LV	+Power 42U-80LV	+Power 30U-80LV	+Power 30U-120LV	+Power 42U-140LV
PHASE	3-phase in / 3-phase out				
CABINET CAPACITY*	54 KW	72 KW	72 KW	108 KW	126 KW
BATTERY TYPE	Built-in Battery		External Battery		
ONE POWER MODULE CAPACITY	20KVA/18KW				
MAX. POWER MODULE NO.	3	4	4	6	7+1
MAX. BATTERY SET NO.**	3	4	-	-	-
INPUT					
Nominal Voltage	3 x 208 VAC (3Ph+N)				
Voltage Range	156 ~ 253 VAC at 100% load; 121 ~ 155VAC at <70% load				
Nominal Frequency	50/60Hz (Auto sensing)				
Frequency Range	40Hz ~70Hz				
Power Factor	> 0.99 at 100% load, >0.98 at 50% load				
Harmonic Distortion (THDi)	< 3% @ 100% load				
OUTPUT					
Nominal Voltage	3 x 208V/220VAC (3Ph+N)				
Voltage Regulation (Steady state)	≤ ± 1% Typical (balanced load) ; ≤ ± 2% Typical (imbalanced load)				
Voltage Regulation (Transient)	≤ ± 5% Typical				
Nominal Frequency	50/60Hz				
Frequency Range (Synchronized)	46Hz ~ 54Hz or 56Hz ~ 64Hz				
Overload Capability	1 hour for 110%, 10 mins for 125%.; 1 min for 150%, 200ms for >150%				
Harmonic Distortion	≤ 1.5% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)				
Efficiency	Up to 92.5% at over 50% load				
BATTERY / CHARGER					
Nominal Voltage	+/- 120V (12V x 20 pcs)				
Float Charging Voltage	2.25V / Cell				
Boost Charging Voltage	2.35V / Cell				
Temperature Compensation	Yes				
Maximum Charging Current	8A for each power module (User-adjustable)				
PHYSICAL					
Cabinet Dimension (D x W x H) mm	1100 x 600 x 1475 [30U]	1100 x 600 x 2010 [42U]	1100 x 600 x 1475 [30U]	1100 x 600 x 1475 [30U]	1100 x 600 x 2010 [42U]
Net Weight (kg)	675	828	335	437.5	7 Power Modules: 514.5 8 Power Modules: 549
ENVIRONMENT					
Operating Temperature	0 ~ 40°C				
Relative Humidity	0 ~ 95% non-condensing				
Altitude	<1000m for Nominal power				
IP Class	IP 20				
MANAGEMENT					
Smart RS-232 / USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				
STANDARDS					
Safety	UL1778, CSA C22.2 No. 107.3-05				
EMC	FCC Part 15, Subpart B Class A				

*When temperature is above 30°C, the output power factor will be de-rated, 0.8 at 31°C ~35°C and 0.7 at 36°C ~40°C.

** One battery module contains 10 pcs of 12V/7Ah or 12/9Ah sealed lead acid batteries in one tray. One complete battery set contains 4 battery modules.

***If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

Product specifications are subject to change without further notice.



Model	Description	Dimension D x W x H (mm)	Weight (kg)
PM-20LV	3P/3P 20KVA / 18KW power module	650 x 440 x 132(3U)	34.5
Battery Module	10 pcs of 12V 9Ah batteries	735 x 107 x 155	26

+Power E



- High efficiency online double conversion technology
- Output power factor 1
- Modular design lowers MTTR
- Adjustable battery numbers
- Adjustable charging current
- Built-in maintenance bypass switch for easy maintenance without interruption
- Graphic 5.7" LCD design for easy configuration
- Support 1+1 cabinets parallel

+Power E 400V Online UPS Specification

MODEL	+Power E 15U-60	+Power E 15U-90
PHASE	3-phase in/3-phase out	
MAX CABINET CAPACITY*	60KW	90KW
BATTERY TYPE	External Battery	
ONE POWER MODULE CAPACITY	20KVA / 20KW	30KVA / 30KW
MAX. POWER MODULE NO.	3	
INPUT		
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)	
Voltage Range	305 ~ 478 VAC at 100% load; 208 ~ 478 VAC at <70% load	
Nominal Frequency	50/60Hz (Auto sensing)	
Frequency Range	40Hz ~70Hz	
Power Factor	> 0.99 at 100% load, >0.98 at 50% load	
Harmonic Distortion (THDi)	< 3% @ 100% load	
OUTPUT		
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)	
Voltage Regulation (Steady state)	≤ ± 1% Typical (balanced load) ≤ ± 2% Typical (unbalanced load)	
Voltage Regulation (Transient)	≤ ± 5% Typical	
Nominal Frequency	50/60Hz	
Frequency Range (Synchronized)	46Hz ~ 54Hz or 56Hz ~ 64Hz	
Overload Capability	1 hour for 110%, 10 mins for 125%, 1 min for 150% and 200ms for >150%	
Harmonic Distortion	≤ 1.5% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)	
Efficiency	Up to 94.5%	
BATTERY / CHARGER		
Nominal Voltage	+/- 216V (12V x 36 Pcs)	
Maximum Voltage	+/- 240V (12V x 40 Pcs)	
Minimum Voltage	+/- 192V (12V x 32 Pcs)	
Float Charging Voltage	2.25V/Cell	
Boost Charging Voltage	2.35V/Cell	
Temperature Compensation	Yes	
Maximum Charging Current	6A (User-adjustable)	8A (User-adjustable)
PHYSICAL		
Cabinet Dimension (D x W x H) mm	1000 x 515 x 760	
Net Weight (kg)	182	183.5
ENVIRONMENT		
Operating Temperature	0 ~ 40°C	
Relative Humidity	0 ~ 95% non-condensing	
Altitude	<1000m for Nominal power	
IP Class	IP 20	
MANAGEMENT		
Smart RS-232 / USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC	
Optional SNMP	Power management from SNMP manager and web browser	
STANDARDS		
Safety	IEC/EN 60950-1; IEC/EN 62040-1	
EMC	IEC/EN 62040-2 Category C3	

*When temperature is above 30°C , the output power factor will be de-rated, 0.9 at 31°C ~35°C and 0.8 at 36°C ~40°C .

**If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.
Product specifications are subject to change without further notice.

Model	Description	Dimension DxWxH(mm)	Weight (kg)
PM-30HV	3P/3P 30KVA / 30KW power module	650 x 440 x 132 (3U)	34.5
PM-20HV	3P/3P 20KVA / 20KW power module	650 x 440 x 132 (3U)	34.0
Battery Cabinet	120 pcs of 12V 9Ah batteries	1000 x 514 x 610	387

Rack Configuration



+Power 400V 30K Cabinet						
Rack Model Name	30U-90HV	30U-120HV	30U-180HV	42U-120HV	42U-210HV	42U-300HV
Height	30U	30U	30U	42U	42U	42U
STS Capacity	90K	120K	210K	120K	210K	300K
Type of installable power module	HV 30K or HV 20K	HV 30K or HV 20K	HV 30K or HV 20K	HV 30K or HV 20K	HV 30K or HV 20K	HV 30K or HV 20K
Max. number of installable power module	3	4	6	4	8	10
Number of installable battery modules in Layer	3	N/A	N/A	5	N/A	N/A
Max. capacity of installing HV 20K module	60K	80K	120K	80K	160K	200K
Max. capacity of installing HV 30K module	90K	120K	180K	120K	210K (If installed with 8 pcs, one is for redundancy)	300K
Max capacity w/ internal battery, no external battery	60K (Maximum with 3 layers of battery modules)	N/A	N/A	90K (Maximum with 5 layers of battery modules)	N/A	N/A
Built-in empty battery modules in BOM	Yes, 12pcs	No	No	Yes, 20pcs	No	No



+Power 208V 20K Cabinet					
Rack Model Name	30U-60LV	30U-80LV	30U-120LV	42U-80LV	42U-140LV
Height	30U	30U	30U	42U	42U
STS Capacity	LV 60KVA	LV 80KVA	LV 140KVA	LV 80KVA	LV 140KVA
Type of installable power module	LV 20K only	LV 20K only	LV 20K only	LV 20K only	LV 20K only
Max. number of installable power module	3	4	6	4	8
Number of installable battery modules in layer	3	N/A	N/A	4	N/A
Max. capacity of installing LV 20K module	60KVA	80KVA	120KVA	80KVA	140KVA (If installed with 8 pcs, one is for redundancy.)
Max capacity w/ internal battery, no external battery	60K	N/A	N/A	80K	N/A
Built-in empty battery modules in BOM	Yes, 12pcs	No	No	Yes, 16pcs	No

+Power 400V 20K Cabinet			
Rack Model Name	30U-80-20KHV	30U-120-20KHV	42U-200-20KHV
Height	30U	30U	42U
STS Capacity	90K	120K	210K
Type of installable power module	HV 20K only	HV 20K only	HV 20K only
Max. number of installable power module	4	6	10
Number of installable battery modules in layer	N/A	N/A	N/A
Max. capacity of installing HV 20K module	80K	120K	200K
Max. capacity of installing HV 30K module	N/A	N/A	N/A
Max capacity w/ internal battery, no external battery	N/A	N/A	N/A



+Power E 208V Cabinet		
Rack Model Name	E-60LV	E-60LV-L
Height	15U	~30U
STS Capacity	LV 60K	LV 60K
Type of installable power module	LV 20K only	LV 20K only
Max. number of power module	3	3
Number of installable battery module in layer	N/A	3
Max. capacity of installing LV 20K module	60KVA	60K
Max capacity w/ internal battery	N/A	60
Built-in empty battery modules in BOM	No	The battery module of +Power E is easy-replaceable without hot-swappable design
Note	+Power E (15U) without battery module is available. +Power E (30U) with battery module is available.	

+Power E 400V Cabinet				
Rack Model Name	E-90HV	E-60-20KHV	E-90HV-L	E-60-20KHV-L
Height	15U	15U	~30U	~30U
STS Capacity	90K	60K	90K	60K
Type of installable power module	HV 30K or HV 20K	HV 20K only	HV 30K or HV 20K	HV 20K only
Max. number of installable power module	3	3	3	3
Number of installable battery module in layer	N/A	N/A	3	3
Max. capacity of installing HV 20K module	60K	60K	60K	60K
Max. capacity of installing HV 30K module	90K	N/A	90K	N/A
Max capacity w/internal battery, no external battery	N/A	N/A	60K	60K
Built-in empty battery modules in BOM	No	No	The battery module of +Power E is easy-replaceable without hot-swappable design	
Note	+Power E (15U) without battery module is available. +Power E (30U) with battery module is available.			

Outdoor UPS



- Provide continuous power to critical loads during blackout in rugged environment
- Wide operating temperature range from -40°C to 80°C suits for outdoor applications
- Built-in boost and buck AVR to regulate input voltage
- Selectable transfer time for normal or generator modes
- Provide RS-232, USB and SNMP intelligent port
- Circuit breaker protection on AC input, AC output and external battery input
- User-adjustable charging current
- Adjustable input threshold voltage
- Provide programmable signals for dry contacts
- Battery compensation optimizes battery lifecycle

Outdoor UPS Specification

MODEL		Outdoor 2000A	Outdoor 2000E
Rated Power		2000VA / 1600W	
INPUT			
Nominal Voltage		120 VAC	230/240 VAC
Acceptable Voltage Range		88 ~152 VAC user programmable. Default: 100 ~ 130VAC	176 ~ 300VAC user programmable. Default: 200 ~ 260VAC
Frequency Range		50 Hz/60 Hz (Auto sensing)	
OUTPUT			
Nominal Voltage		120 VAC	230/240 VAC
Voltage Regulation (Batt. Mode)		120 VAC ± 5%	230/240 VAC ± 5%
Output Frequency		50Hz/60Hz ± 0.1%	
THD (Batt. Mode)		<3% @ Full resistive load	
Efficiency	AC Mode	95%	
	AVR Mode	90%	
	Battery Mode	90%	
Transfer Time	Normal Mode (max.)	12ms	
	Generator Mode (max.)	25ms	
Waveform		Pure sinewave	
BATTERY			
Nominal DC Voltage		48VDC	
Low DC Warning Voltage		46VDC ± 0.4VDC @ no load	
Battery Type		AGM	
Charging Current		2A/4A/6A/8A/10A (Adjustable)	
INDICATORS			
Bypass Mode		Green LED on	
Battery Mode		Green LED flashing	
No Output		Green LED off	
Warning with Output		Yellow LED on	
Fault without Output		Red LED on	
MANAGEMENT			
Communication		RS-232/USB and optional SNMP	
Dry Contact Rating		3A @ 125VAC	3A @ 250VAC
PHYSICAL			
Dimension, Dx W x H (mm)		240 x 400 x 133	
Net Weight (kgs)		13	
Type of Mechanical Protection		IP20	
ENVIRONMENT			
Humidity		5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature		-40°C to 80°C	-40°C to 70°C
Noise Level		< 48dB	
COMPLIANCE			
EMI Compliance		Class A FCC/CISPR [EN50091-2: 1995]	
Surge Protection		IEEE/ANSI C.62.41 & 2KV, L-N	

Product specifications are subject to change without further notice.

Automatic Voltage Regulator

Scudo AVR



MODEL	Scudo 600	Scudo 1000	Scudo 1200
CAPACITY	600 VA / 360 W	1000 VA / 600 W	1200 VA / 720 W
INPUT			
Voltage	220/230/240 VAC		
Voltage Range	180 - 264 VAC		
Frequency Range	50 Hz		
OUTPUT			
Voltage	220/230/240 VAC		
Voltage Regulation	± 8 %		

Shieldo AVR



MODEL	Shieldo 400	Shieldo 600	Shieldo 800	Shieldo 1000	Shieldo 1200	Shieldo 2000
CAPACITY	400 VA / 200 W	600 VA / 300 W	800 VA / 400 W	1000 VA / 500 W	1200 VA / 600 W	2000 VA / 1000 W
INPUT						
Voltage	120 VAC					
Voltage Range	95 - 148 VAC					
Frequency Range	60 Hz					
OUTPUT						
Voltage Regulation	± 10%					
Modem/Phone Line Surge Protection	RJ-11					
Receptacles	8 (4 for AVR protection and 4 for extended use)					



MODEL	Shieldo 500	Shieldo 600	Shieldo 700	Shieldo 800
CAPACITY	250 W	300 W	350 W	400 W
INPUT				
Voltage	230 VAC			
Voltage Range	120 - 290 VAC			
Frequency Range	50 Hz			
OUTPUT				
Voltage Regulation	- 15% ~ + 10%			
Modem/ Phone Line Surge Protection	RJ-11			
Receptacles	3 x India			

Defendo AVR



MODEL	Defendo 600	Defendo 1200	Defendo 2000	Defendo 600	Defendo 1000	Defendo 1500
CAPACITY	600 VA / 300 W	1200 VA / 600 W	2000 VA / 1000 W	600 VA / 300 W	1000 VA / 500 W	1500 VA / 750 W
INPUT						
Voltage	120 VAC			230 VAC		
Voltage Range	95 - 148 VAC			184 - 284 VAC		
Frequency Range	60 Hz			50 Hz		
OUTPUT						
Voltage Regulation	± 10%					
Receptacles	NEMA x 8			Schuko x 3 / Universal x 3 / India x 3 / UK x 3		

Aegis AVR



- Microprocessor control guarantees high reliability
- Selectable input voltage range
- Time delay function eliminates transients that can affect connected equipment
- Provide stable output voltage
- Provide under-voltage, over-voltage, over-heat and over current protection
- Provide surge and spike suppression

Aegis AVR Selection Guide

MODEL	Aegis 500	Aegis 1000	Aegis 1500	Aegis 2000	Aegis 3000	Aegis 5000	Aegis 8000	Aegis 10000
CAPACITY	500 VA / 400 W	1000 VA / 800 W	1500 VA / 1200 W	2000 VA / 1600 W	3000 VA / 2400 W	5000 VA / 4000W	8000 VA / 6400W	10000 VA / 8000W
INPUT								
Voltage	220 VAC or 230 VAC					220 VAC or 230 VAC		
Voltage Range	110 VAC - 270 VAC or 110 VAC - 280 VAC (Wide input window) 140 VAC - 260 VAC or 150 VAC - 270 VAC (Normal input window)					140 - 260 VAC or 140 - 270 VAC Option 1: 100 - 260 VAC or 100 - 270 VAC Option 2: 80 - 260 VAC or 80 - 270 VAC		
Frequency Range	60 Hz / 50 Hz							
OUTPUT								
Voltage	220 VAC or 230 VAC					220 VAC or 230 VAC		
Voltage Regulation	-10% ~ +10%							
EFFICIENCY								
Normal Mode	95%					98%		
AVR Mode	92%					92-95%*		
PROTECTION								
Delay Time	3 minutes or 10 Seconds							
Full Protection	Over-voltage, under-Voltage, over-heat and over current Protection							
INDICATORS								
LED Indicator	Normal indicator, AVR indicator, delay time setting and fault indicator							
Digital or Meter Display	Input and output voltage							
PHYSICAL								
Dimension, D X W X H (mm)	197 x 110 x 124		234 x 134 x 181		297 x 150 x 199	450 x 210 x 237		
Net Weight (kgs)	2.4	3.91	5.4	6.55	8.56	10.96	14.31	15.95
ENVIRONMENT								
Operating Temperature	0- 40°C							
Humidity	0-90 % relative humidity (Non-condensing)							

* Efficiency rate will be different based on different models and input voltage range
Product specifications are subject to change without further notice.

