

About Ablerex

Ablerex has combined its core technology of electricity and power electronic fields with its control technology and applications in order to concentrate its efforts on the development of products that promote electricity usage stability, improve power quality and introduction of green energy to the global market.

Our professionalism demands the highest standards of excellence, teamwork, effectiveness and contribution to demonstrate our strong innovative ability.

Ablerex has invested a lot of resources in technical research and development to sustain innovation and differentiation. This strong commitment has promoted the fruitful existence of hundred patented techniques and sustainable development. Ablerex received the innovative research award by Ministry of Economic Affairs (R.O.C) and recognition of Ablerex strategy leadership in business development by a worldwide market researcher.

To deliver products of high level of reliability and quality, a large number of automated production equipment and precise auto-inspection facilities installed at Ablerex manufacturing plants. Advanced managed in KPI system ensuring continuous improvements on productions process and quality controls, improving competitiveness of the business and benefiting business partners.

The main products include Uninterruptible Power System, Active Power Filter, Photovoltaic Inverter, Wireless Battery Monitoring System, and Power Monitoring and Management System. By continuously launching new technology and developing high quality products, Ablerex is able to focus on building greater trust and collaboration among the clients.

Ablerex takes the global perspective approach, constantly increasing service spots to build global marketing channels. With real-time tech support, Ablerex creates brand values building a strong professional bonds with clients.

Ablerex will continue the work in electricity and electronic fields to innovate products with the features from Smart Grid's requirements, and to develop related green products for environment protection in the globe. We look forward to becoming the leading enterprise of the industry in the new era.

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Three Phase UPS



- High Input Power Factor >0.99 and Low Input THDi% <3%
- High Output Power Factor 1.0
- Common Battery Used for Parallel Redundant System
- Dual Input Mains for Manage Independent Power Sources
- User Friendly Operator Interface—4.3" Colour LCD Touch Screen

A BRIC ST 30000VA/30000W, 60000VA/60000W

B BRIC 30S 30000VA/30000W Module

C Taurus Series 10000VA~60000VA



BRIC Series On-Line UPS

30000W / 60000W



- Wide Input Voltage 320VAC~480VAC
- High Input Power Factor >0.99
- Low Input THDi% <3%
- High Output Power Factor 1.0
- Common Battery Used for Parallel Redundant System
- Wide Batteries Range 32~40 Blocks(12V)
- Dual Input Mains to Manage Independent Power Sources
- Internal Manual Bypass for Easy Maintenance without Power Interruption
- User Friendly Operator Interface—Colour LCD Touch Screen



Specifications

Model	BRIC 30S		BRIC ST 30	BRIC ST 60
Capacity	30000VA/30000W		30000VA/30000W	60000VA/60000W
Parallel	Up to 120KVA			
Input	Voltage			
	400V 3 Phase + N			
	Voltage Tolerance			
	±20%			
	Frequency			
	45 ~ 65Hz			
	Power Factor			
	≥ 0.99			
	THDi			
	<3%			
Output	Voltage			
	380/400/415V 3 Phase + N			
	Voltage Tolerance			
	±1% (Static Load)			
	Power Factor			
	1			
	Frequency			
	50/60Hz			
	Frequency Tolerance			
	±0.05% (free running)			
	Crest Factor			
	3:1			
	Voltage Harmonic Distortion			
	<2% with linear load; <5% with distorting load			
	Overload			
	110% for 60 minutes, 125% for 10 minutes, 150% for 1 minutes			
	Number of Batteries			
	32~40pcs configurable			
Battery ***	Max. Charging Current		10A	20A
	Common Battery for Parallel Configuration		Yes	
	VFI Mode		>93%	
Efficiency	ECO Mode		>97%	
	Voltage		380/400/415V 3 Phase + N	
	Voltage Tolerance		±10%	
Bypass	Frequency		50/60Hz	
	Frequency Tolerance		±3Hz	
Physical	Dimensions (W x D x H) mm		440 x 760 x 430	560 x 900 x 1200
	Weights(Kgs)		74	174
				250
Communication	Protection Grade		IP20	
	Display and MMI		4.3" Colorful LCD Touch Screen	
	Built-in Communication Port		RS-232, EPO	
Environment	Optional Communication		2 Communication Slots for SNMP Card, RS-485 Modbus Card, Dry Contact Card	
	Operation Temperature		0~40°C / 32~104°F	
	Operation Humidity		0~95% (w/o condensation)	
	Operating Altitude		<1000 m without derating	
	Tested to Standards		LVD: EN62040-1 EMC requirements: EN62040-2	
	Mark		CE	
	Noise (at 1 meter)		<60dBA	<63dBA

* Specifications subject to change without notice.

** Depending on the model and voltage, please contact Ablerex for more information.

*** External Battery bank

**** The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.



TAURUS Series On-Line UPS

10000VA ~ 60000VA



- 3 Level Technology
- High Efficiency, On-line Mode Efficiency 96%
- High Input Power Factor >0.99
- Low Input Harmonic, THDi% <3%
- High Output Power Factor 1.0
- Power Scalable and Parallel Redundancy
- Common Battery Used for Parallel Redundant System
- Advanced Operator Interface—Colour LCD Touch Screen



Specifications

Capacity	10000VA	20000VA	30000VA	40000VA	60000VA
Input	Voltage				
	400V 3 Phase + N				
	Voltage Tolerance				
	±20%				
	Frequency				
	40 ~ 70Hz				
	Power Factor				
	≥ 0.99				
	THDi				
	<3%				
Output	Voltage				
	380/400/415V 3 Phase + N				
	Voltage Tolerance				
	±1% (Static Load)				
	Power Factor				
	1				
	Frequency				
	50/60Hz				
	Frequency Tolerance				
	±0.05% (free running)				
	Crest Factor				
	3:1				
	Voltage Harmonic Distortion				
	<1% with linear load; <3% with distorting load				
Battery	Overload				
	110% for 60 minutes, 125% for 10 minutes, 150% for 1minutes				
	Number of Batteries				
	32~40pcs configurable				
	Max. Charging Current	3.5A	7A	10A	20A
Efficiency	Common Battery for Parallel Configuration				
	Yes				
	VFI Mode				
	>96%				
	ECO Mode				
Bypass	>98%				
	Voltage				
	380/400/415V.3 Phase + N				
	Voltage Tolerance				
	±5% ~ ±15% (Programmable)				
Parallel	Frequency				
	50/60Hz				
	Frequency Tolerance				
	±1Hz / ±3Hz (Selectable)				
	Parallel				
Mechanical	Up to 6 units				
	Dimensions (W x D x H) mm				
	440 x 840 x 1390				
	Protection Grade				
	IP20				
HMI & Communication	Display and MMI				
	4.3" Colorful LCD Touch Screen				
	Built-in Communication Port				
	USB, EPO, Dry Contact				
	Optional Communication				
Environment	2 Communication Slots for SNMP Card, RS-485 Modbus Card, Dry Contact Card				
	Operation Temperature				
	0~40°C / 32~104°F				
	Operation Humidity				
	0~95% (w/o condensation)				
	Tested to standards				
	LVD: EN62040-1, EMC requirements: EN62040-2				
	Mark				
	CE				
	Noise (at 1 meter)	<52dBA		<55dBA	
				<60dBA	

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Electrical features

- Dual Input mains
- Internal maintenance bypass
- Easy parallel without more PCBs
- External temperature sensor
- DC cold start (option)

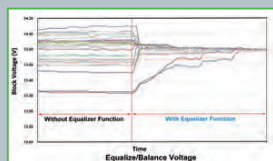
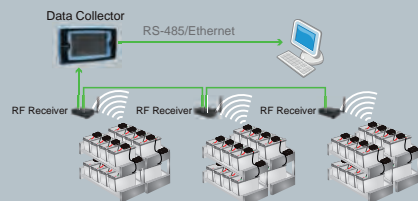


Enerbatt 3G

Wireless Battery Monitoring System



- Wireless Communication
- Easy Installation Save Cost
- Graphic LCD Touch Screen
- Real Time Monitoring: Block Voltage, Block Impedance, Temperature, String Voltage Current
- Equalize and Balance Block Voltage.
- Extend Battery Life Time
- Alarm via Email Dry Contact
- Build in Storage Memory for Battery History Database
- Colorful Bar/Curve Diagrams
- User-default Configurations Deviation Levels
- Provides Ethernet/RS-485 for Remote Monitoring



Specifications

Model	BMS-DC-LCDII (Data Collector)
Display	LCD 7" Graphic Touch Screen
Input Power Supply	12Vdc
Power Consumption	≤ 9W
Communication Ports	Ethernet x 1, RS-485 Modbus RTU x 1 Output Dry Contact Port x 3, Input Dry Contact Port x 1
Monitoring RF Receiver	Up to 63 RF Receivers
Manage Nodes	Maximum 750 nodes
Storage Media	Up to 16 Gigabyte SD/MMC Flash Memory Card
Dimensions (WxHxD)	260 mm x 150 mm x 57 mm / 10.2" x 5.9" x 2.2"
Weight	0.85 kg / 1.9 lbs

Model	BMS-RFR (RF Receiver)
Input Power Supply	12Vdc
Power Consumption	≤ 3W
Receiving Interface	RF 2.4 GHz for wireless ¹
Monitoring Nodes	Maximum 256 nodes
Dimensions (WxHxD)	129 mm x 70 mm x 35.5 mm / 5.1" x 2.7" x 1.4"
Weight	0.4 kg / 0.9 lbs

Model	BMS-BMK (Battery Measure Kit)		
Block Voltage	2 V	6 V	12 V
Voltage Measurement Range	1.48~4.00 V	4.2~8.0 V	8.5~16.0 V
Accuracy	±5 mV	±5 mV	±10 mV
Battery Impedance Resolution	2 μΩ	10 μΩ	>65 Ah
			<65 Ah
			15 μΩ 25 μΩ
Temperature Measurement ²	0~100°C ±1°C / 32~212°F ± 1.8°F		
Power Consumption	≤ 0.5 W		
Input Impedance	≥ 1 MΩ		
Dimensions (WxHxD)	100 mm x 27 mm x 70 mm / 3.9" x 1.1" x 2.8"		
Weight	0.1 kg / 3.4 ozs		

Model	BMS-SMK (String Measure Kit)
Voltage Measurement Range	Up to 750Vdc
Accuracy	±0.2% of normal voltage
Temperature Measurement ²	0~100°C ±1°C / 32~212°F ± 1.8°F
Current Measurement ³	0~3000 A
Input Power Supply Range	35~60 VDC
Power Consumption	≤ 3 W
Input Impedance	≥ 1 MΩ
Dimensions (WxHxD)	100 mm x 27 mm x 70 mm / 3.9" x 1.1" x 2.8"
Weight	0.09 kg / 3.1 ozs

1. Maximum transmitting distance is rated at 50m/164ft in a non-concealed room or cabinet. Recommended distance is less than 20m/65ft for optimal performance.

2. Optional Temperature Sensor (TES) is required for temperature measurement.

3. Optional Hall Current Transformer (HCT) is required for battery current measurement.

4. The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.

Single Phase UPS



- A Glamor Line-interactive Simulated Sine Wave UPS, GR450VA~2000VA
- B Ares Series DSP-Controlled On-Line UPS, ARES 1000VA~3000VA
- C Ares Plus Tower Series DSP-controlled On-line UPS, ARES Tower Plus 1000VA~3000VA
- D Ares RT Series DSP-Controlled On-Line UPS, ARES RT 1000VA~3000VA
- E Ares Plus RT Series True On-line Double Conversion Topology UPS, ARES Plus RT 1000VA~3000VA
- F Mars III RT Series Convertible Redundancy On-Line UPS, MSIII RT 4500VA~10000VA
- G Mars II Series Redundancy On-Line UPS, MSII 4500VA~20000VA
- H Mars II Series Convertible Redundancy On-Line UPS, MSII RT 4500VA~20000VA

Glamor Series

Line-Interactive Simulated Sine Wave UPS

GR 450VA~GR 2000VA



- Built-in AVR
- LED/LCD Display(Optional)
- AC Auto Restart
- Cold Start Function



■ GR 450~GR 850



■ GR 1000~GR 2000

Specifications

Model	GR 4 0		GR 6 0		GR 0	GR 1000	GR 1 00	GR 2000
Input	Voltage Range**		160Vac~290Vac					
	Frequency Range		45~65Hz(Auto sensing)					
	Capacity	250W	360W	500W	600W	900W	1200W	
Output	Output Voltage (Battery mode)		220/230/240Vac ±10%					
	Frequency Range (Battery mode)		50/60Hz ±1Hz					
	Transfer Time		2~6ms(typical)					
	Output Waveform		Simulated SineWave					
Battery	Type	Number	12V/5Ah x 1	12V/7Ah x 1	12V/9Ah x 1	12V/7Ah x 2	12V/7Ah x 2	12V/9Ah x 2
	Recharge Time (to 90%)		4~6 hours					
Display	LCD (Option)		AC mode, AVR mode, Battery mode, Battery level, Load level, Input voltage, Output voltage, Fault, and Battery weak					
	LED (Standard)		3 LEDs: Line mode, Battery mode and Fault			6 LEDs: Line/Battery mode, Fault, Load/Battery level		
Alarm	Audible or Visual		Battery mode / Battery low / Overload / System Fault					
Protection	Full Protection		Overload, Short circuit, Discharge, overcharge and optional R -11/R -45 surge protection					
Function	DC Start		Yes					
	Plug-in Charging		Yes					
Physical	Dimension (WxHxD, mm)		100 x 140 x 292			148 x 198 x 315		
	Net Weight (kgs)	4	5	5.5	9	10.5	11.8	
Envirnment	Operation Temperature		0~40°C / 32~104°F					
	Operation Humidity		20%~95 %RH (Without condensing)					
	Altitude		1000m / 3280ft without Derating					
	Noise Level		≤ 40dB					
Interface	Interface (Option)		USB, RS-232					
	Compatible Platforms		Microsoft Windows series, Linux, Mac, etc.					
Standards and Certifications	Safety		EN62040-1					
	EMC		EN62040-2, EN61000-3-2, EN61000-3-3					
	Marks		CE					

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** Depending on the model and rating voltage, please contact Ablerex for more information.

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upiter Pro

Line-Interactive Sine Wave UPS

JP PRO 1000VA~3000VA



- AVR Boost and Buck
- Pure Sine Wave Output
- User Friendly LCD Display
- Advanced Battery Management
- Nearly zero Transfer Time
- 97% High Efficiency in Normal Mode
- Easy Swappable Battery
- Patent RS232 and USB Communication Interfaces



Specifications

Model	P1000		P1 00	P2000	P3000
Input	Voltage		110/115/120 or 220/230/240 +/-25%, DIP Switch Selectable		
	Frequency		50/60+/-5% (Auto Sensing)		
	Phase		Single phase with ground		
Output	Voltage		110/115/120 or 220/230/240 +3%~-10%		
	Capacity	1000VA/600W	1500VA/900W	2000VA/1200W	3000VA/1800W
	Output Waveform		Pure Sine Wave		
	Transfer Time (AC to DC)		4-6ms typical		
	DC Start		Yes		
Battery	Number of batteries		2	4	
	Type		Sealed Lead Acid Maintenance Free		
	Capacity	12V/7AH	12V/9AH	12V/7AH	12V/9AH
	Rated Battery Voltage		24Vdc	48Vdc	
	Recharge Time (to 90%)		4 hours		
Display	LED Panel		Utility Normal, Backup, UPS Fault Battery s condition		
	LCD Panel		Measurements: Load Level(%), Battery Level(%), LED: Utility Normal(Green), Backup Mode(Amber), Fault(Red) Sign: Bypass, AVR Boost/Buck, Battery Low/Replace/Fault, UPS Fault, Site Wiring Fault, Overload		
	Self-Diagnostics		Upon Power on and Software Control		
Alarms	Audible and Visual		Line Failure, Battery Low, Overload and System Fault Conditions		
Protection	Overload	AC Mode	>110% Buzzer continuously alarms		shuts down after 10 minutes
		Inv. Mode	>120% Buzzer continuously alarms		shuts down after 10 seconds
	Short Circuit	AC Mode	Input Fuse	Electronic Circuit	
		Inv. Mode	Inverter shutdown immediately		
Physical	Dimensions (WxHxD, mm/inch)		173x247x369 / 6.8x9.7x14.5		173x247x427 / 6.8x9.7x16.8
	Weight(kg/lbs)	120V	13/28.6	15/33	22/48.4
		230V			24/52.8
	Outlets	120V	(6) NEMA5-15R		
230V		(6) IEC-320-C13			
Environment	Operation Temperature		0~40°C / 32~104°F		
	Humidity		20%~90%RH (Without condensation)		
Interface	Interface Type		RS232/USB		
	Compatible Platforms		Microsoft Windows series, Linux, Mac, etc.		
Standard and Certifications	Safety		EN62040-1-1		
	EMC		EN62040-2, EN61000-3-2, EN61000-3-3		
	Markings		CE		

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anus & anus L

Line-interactive Sine Wave UPS

JC & JCXL 1000VA~3000VA



- Line Interactive Sine Wave UPS
- Rack Tower Convertible Design
- 0.9 Output Power Factor
- State-of-the-art Rotating LCD Panel
- Toroidal Transformer Technology
- Faster High Rate Charger
- 95% High Efficiency in Utility Mode
- Automatic Voltage Correction
- Hot Swappable Battery Function
- Customer Options Slot for Increased Flexibility.
- Patent RS232 and USB Communication Interfaces
- Smart Fan Operation



■ C 1000/1500



■ C 2000/3000



■ C L1000/1500



■ C L2000/3000

Specifications

Model	C 0	C1000	C1 00	C2200	C3000	C L1000	C L1 00	C L2200	C L3000
Input	Voltage 110/120/127Vac or 220/230/240Vac +/-25% Frequency 45~65(auto-sensing) Phase Single phase with ground								
Output	Voltage 220/230/240Vac +/-5% 110/120/127Vac or 220/230/240Vac +/-5% 110/120/127Vac or 220/230/240Vac +/-5% Capacity 750VA/675W 1000VA/900W 1500VA/1350W 2200VA/1980W 3000VA/2700W 1000VA/900W 1500VA/1350W 2200VA/1980W 3000VA/2700W Frequency (Backup mode) 50/60Hz ±0.5Hz Output Waveform Pure Sine Wave Transfer Time (AC to DC) 4-6ms typical								
DC Start	DC START Yes Number of batteries 2 3 3 6 6 4 4 8 8 Type Sealed Lead Acid Maintenance-free								
Battery	Capacity 12V/7AH 12V/7AH 12V/9AH 12V/7AH 12V/9AH 12V/7AH 12V/9AH 12V/7AH 12V/9AH Rated Battery Voltage 24Vdc 36Vdc 36Vdc 72Vdc 72Vdc 24Vdc 48Vdc Recharge Time (to 90%) 5 hours								
Display	LED Panel Line Mode, Battery Mode Fault LCD Panel Line bypass, AVR Boost(Buck), Backup, Battery Level, Battery Low, Load Level, Battery Fault, UPS Fault, etc. Self-Diagnostics Upon Power On and Software Control								
Alarms	Audible and Visual Mains Fault, Low Battery, Overload and Fault conditions								
Protection	Overload AC Mode Output breaker / >100% alarms only, >110% for 10min and then shutdown, >120% shutdown immediately Inv. Mode >120% for 10 sec. and then shutdown, >130% shutdown after 1 cycle Short Circuit AC Mode Output Breaker/Electronic Circuit Inv. Mode Inverter shutdown immediately								
Physical	Dimensions (WxHxD, mm/inch) 440x88x405 / 17.3x3.5x16 440x88x405 / 17.3x3.5x26 440x88x485 / 17.3x3.5x19 440x88x694 / 17.3x3.5x27.3 Weight(Kg/lbs) 120V N/A 19.7/43.34 21.1/46.6 34.6/76.1 38.2/84 25/55 27.8/59.8 41.8/92 47.8/105 230V 15/33 19.4/42.7 20.9/46 33.8/74.4 37.2/81.8 25/55 27.8/59.8 42/92.4 46.2/101.6 Outlets 120V N/A (8) NEMA 5-15R (6) NEMA 5-15R, (2) NEMA 5-20R (5) NEMA 5-15R, (2) NEMA 5-20R, (1) NEMA L5-30R (6) NEMA 5-15R 230V (8) IEC-320-C13 (8) IEC-320-C13, (1) IEC-320-C19 (6) IEC-320-C13 (6) IEC-320-C13, (1) IEC-320-C19								
Environment	Operation Temperature 0~40°C / 32~104°F Humidity 20%~90%RH (Without condensation)								
Interface	Interface Type Standard: RS232 / USB / EPO Option: Dry Contact Relay / SNMP/WEB Card Compatible Platforms Microsoft Windows series, Linux, Mac, etc.								
Standard and Certifications	Safety EN62040-1-1, UL1778 EMC EN62040-2, EN61000-3-2, FCC Class A Markings CE, UL, cUL, FCC **								

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Ares Series DSP-Controlled On-Line UPS

ARES 1000VA~3000VA



- True On-line Double Conversion Topology
- Advanced DSP Control Technology
- 0.9 Output Power Factor
- Rack/Tower Design
- Wide Input Voltage Range
- Active Harmonic Current Control
- Multiple Operation Mode Supported
- Easy Firmware Flash Upgrade
- Optional Remote Emergency Power Off (REPO)
- Optional Programmable Outlets



■ ARES 1000



■ ARES 2000



■ ARES 3000

Specifications

Model	ARES 1000		ARES 2000	ARES 3000
Input	Voltage		110Vac~300Vac **	
	Frequency		45Hz ~ 65Hz	
	Phase		Single phase with ground	
	Power Factor		≥ 0.99 at linear load	
Output	Capacity	1000VA/900W	2000VA/1800W	3000VA/2700W
	Voltage		200/208/220/230/240	
	Frequency (Synchronized Range)		3Hz or 1Hz (selectable)	
	Frequency (Battery Mode)		50Hz/60Hz ± 0.1% unless synchronized to line	
	Current Crest Ratio		3:1	
	Harmonic Distortion		< 3 % (at full linear load)	
	Output Waveform		Pure sine wave	
	Transfer time (AC to DC)		0 ms	
	Efficiency		90% (Line mode)	
	DC start		Yes	
Battery	Number of batteries	2	4	6
	Type Sealed Lead Acid Maintenance Free			
	Capacity		12V/7AH	
	Rated Battery Voltage	24Vdc	48Vdc	72Vdc
	Backup time (80% load)	>5min.	>5min.	>5min.
	Recharge time (to 90%)		4 hours	
Display	LED	Standard Load Level/Battery Level/ Battery Mode/ Normal Mode/Bypass Mode/ Self-Test/ Weak/Bad Battery/Site Wiring Fault/ Fault/ Overload Option Programmable Outlet1/ Programmable Outlet2		
	Self Diagnostics By button of the panel or Software Control			
	Button (ON/Alarm Silence Button)/ OFF Button/ (Test/Level Button)			
Alarms	Audible and Visual Line Failure, Battery Low, Overload, System Fault Conditions			
Protection	Overload capacity		105% continuous, 120% for 30 sec. , 150% for 10 sec.	
	Short Circuit		Output Breaker/Electronic Circuit	
	EPO		Output shutdown immediately	
Physical	Over Temperature		Normal Mode :Transfer to Bypass Mode Battery Mode : UPS shuts down immediately	
	Dimensions (HxWxD, mm)	236x144x367	322x151x444	322x189x444
	Weights (kgs)	11.2	18.8	24.9
	Outlet	(3) 10A,IEC 320-C13	(6) 10A,IEC 320-C13	(6) 10A,IEC 320-C13
Environmental	Operation Temperature		0~40°C / 32~104°F	
	Noise Level		< 50dBA	
	Altitude		1000m / 3280ft without Derating	
	Humidity		20%~90%RH (Without condensing)	
Interface	Interface Type		Standard: RS232 / Communication Slot, Option: USB	
	Communication slot option		Dry contact, SNMP/Web Card, etc.	
	Compatible platforms		Microsoft Windows series, Linux, Mac, etc.	
Standard and Certifications	Safety		IEC/EN 62040-1-1	
	EMC		IEC/EN 62040-2 class A	
	Markings		IEC/EN 61000-4-2/-3/-4/-5/-6/-8, IEC/EN 61000-2-2 ,IEC/EN 61000-3-2/-3	

Battery Ban Specification

UPS model	Code	Bat. Type	Max. uantities	Dimensions (HxWxD mm)
ARES 1000	T04W 07	7AH	4	236x144x367
ARES 2000	T12 07	7AH	12	322x151x444
ARES 3000	T12Y 07	7AH	12	322x151x444

* Specifications subject to change without notice.

** Maximum range will be adjusted according to load level automatically.

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Ares Plus Tower Series

DSP-Controlled On-line

ARES PLUS 1000VA~3000VA



- True On-line Double Conversion Topology
- Advanced DSP Control Technology
- 0.9 Output Power Factor
- Wide Input Voltage Range
- Active Harmonic Current Control
- LCD/LED Display
- Patent Backup Runtime Estimation
- Multiple Operation Mode
- Remote Emergency Power Off (REPO)
- Remote On Off control (ROO)
- Optional Programmable Outlets
- Easy Firmware Flash Upgrade

Specifications

Model	ARES PLUS 1000			ARES PLUS 2000			ARES PLUS 3000			ARES PLUS 1 00			ARES PLUS 2000			ARES PLUS 3000		
Input	Phase				Single + G				Single + G									
	Voltage Range**				110~300Vac				55~150 Vac									
	Frequency Range				45-65Hz (Auto sensing)				44-66Hz (Auto sensing)									
	Input Power Factor				≥0.99 100% linear load				≥0.99 100% linear load									
Output	Capacity		1000VA/900W		2000VA/1800W		3000VA/2700W		1000VA/900W		1500VA/1350W		2000VA/1800W		3000VA/2700W			
	Output Voltage				220/230/240 Vac				100/110/115/120 Vac									
	Output Power Factor***				0.9				0.9									
	Output Voltage Distortion		<3% 100% Linear load <7%		100% non-linear load		<3% 100% Linear load <7%		100% non-linear load									
	Output Voltage Regulation				±1%				±1%									
	Frequency Range				±1Hz or ±3Hz (Selectable)				±1Hz or ±3Hz (Selectable)									
	Crest Factor				3:1				3:1									
	Output Waveform				Pure Sine Wave				Pure Sine Wave									
Efficiency	Line Mode				Up to 92%				Up to 92%									
	High Efficiency Mode				Upt to 97%				Upt to 97%									
Battery	Capacity		12Vdc/7AH		12Vdc/9AH		12Vdc/9AH											
	Battery Number		3		6		6		2		3		4		6			
	Battery Voltage		36		72		72		24		36		48		72			
	Recharge Time (to 90%)				4 hours													
Display	LCD measures				Volatge / Frequency / Load level / Battery level / Output current / Estimated autonomy													
Alarm	Self-Diagnostics				Upon Power-on, Front Panel Setting Software Control, 24 hours routine check													
Protection	Audible or Visual				Line Failure / Battery Low / Transfer to Bypass / System Fault													
Function	Full Protection				Overload, Over temperature, Short circuit, Discharge, overcharge													
	Multi-Mode				Normal/ ECO/ CVCF													
	DC start				Yes													
	Programmable Outlet		Option		Yes													
Physical	Dimensions (WxHxD) mm		154 x 211 x 382.4		192 x 249.9 x 469.8		192 x 319.9 x 451		154 x 258 x 404		154 x 258 x 404		171 x 288 x 441		192 x 320 x 553			
	inch		6.1 x 8.3 x 15.1		7.6 x 9.8 x 18.5		7.6 x 12.6 x 17.8		6.1 x 10.2 x 15.9		6.1 x 10.2 x 15.9		6.7 x 11.3 x 17.4		7.6 x 12.6 x 21.8			
	Net Weight kgs		11.6		22.2		29.8		12.3		15		21.5		30.5			
	lbs		25.6		48.9		65.7		27.1		33.1		47.4		67.2			
Environmental	Operation Temperature				0~40°C / 32~104°F													
	Operation Humidity				20%~95%RH (Without condensing)													
	Altitude				1000m/3280ft without Derating													
	Noise Level				≤50dBA 1 meter front													
Interface	Standard				RS-232, EPO				RS-232, USB, EPO									
	Option				USB, RS-485 (Modbus), Dry Contact Relay, SNMP/WEB Card				RS-485 (Modbus), Dry Contact Relay, SNMP/WEB Card									
	Compatible Platforms				Microsoft Windows series, Linux, Mac, etc.				Microsoft Windows series, Linux, Mac, etc.									
Standards and Certifications	Safety				EN62040-1				UL1778									
	EMC				EN62040-2 (C2)				FCC Class A									
	Marks				CE				cTUVus, FCC									

Battery Packs Specifications

Contents	BT06036	BT120 2	BT120 2	BT0 024	BT06036	BT0 04	BT120 2
Rated Battery Voltage	36	72	72	24	36	48	72
Number of batteries	6	12	12	8	6	8	12
Battery type*	12Vdc / 7Ah	12Vdc / 7Ah	12Vdc / 9Ah	12Vdc / 9Ah	12Vdc / 9Ah	12Vdc / 9Ah	12Vdc / 9Ah
Dimensions (WxHxD)	mm	154 x 258.2 x 403.6	192 x 319.9 x 552.8	171 x 287.6 x 440.6	154 x 258.2 x 403.6	171 x 287.6 x 440.6	192 x 319.9 x 552.8
	inch	6.1 x 10.2 x 15.9	7.6 x 12.6 x 21.8	6.7 x 11.3 x 17.3	6.1 x 10.2 x 15.9	6.7 x 11.3 x 17.3	7.6 x 12.6 x 21.8
Weight	kgs	18.5	38.5	42.1	20.3	27.6	42.1
	lbs	40.8	84.9	92.81	44.8	60.9	92.8

* Specifications subject to change without notice.

** Based on load percentage.

*** The same technical specification products could be sold as different model names in different countries, please consult Ablerex for more information.



Ares RT Series DSP-Controlled On-Line UPS

ARES RT 1000VA~3000VA



- True On-line Double Conversion Topology
- Advanced DSP Control Technology
- 0.9 Output Power Factor
- Rack/Tower Design
- Wide Input Voltage Range
- Active Harmonic Current Control
- LCD/LED Display
- Patent Backup Runtime Estimation
- Multiple Operation Mode Supported
- Remote Emergency Power Off (REPO)
- Programmable Outlets
- Easy Firmware Flash Upgrade



■ ARES RT 1000VA



■ ARES RT 2000VA ARES RT 3000VA

Specifications

Model	ARES RT 1000		ARES RT 2000		ARES RT 3000	
Input	Phase		Single + G			
	Voltage Range**		110~300Vac			
	Frequency Range		45-65Hz (Auto sensing)			
	Input Power Factor		≥ 0.99 Full Load			
Output	Capacity	1000VA/900W	2000VA/1800W		3000VA/2700W	
	Output Voltage	220/230/240 Vac				
	Output Power Factor***	0.9				
	Output Voltage Distortion	≤3%	100% Linear load	≤7%	100% non-linear load	
	Output Voltage Regulation	±1%				
	Frequency Range	±1Hz or ±3Hz (Selectable)				
	Crest Factor	3:1				
	Output Waveform	Pure Sine Wave				
Efficiency	Line Mode	Up to 92%				
	ECO Mode	Up to 97%				
Battery	Capacity	12Vdc/7ah				
	Battery Number	2	4		6	
	Battery Voltage	24	48		72	
	Recharge Time (to 90%)	4 hours				
Display	LED	Load Level/Battery Level/ Battery Mode/ Normal Mode/Bypass Mode/ Self-Test/ Weak/Bad Battery/Site Wiring Fault/ Fault/ Overload				
		Output status/Programmable Outlet1/ Programmable Outlet2				
	LCD measures	Volatge / Frequency / Load level / Battery level				
Alarms	Self-Diagnostics	Upon Power-on, Front Panel Setting		Software Control, 24 hours routine check		
Protection	Audible or Visual	Line Failure / Battery Low / Transfer to Bypass / System Fault				
	Full Protection	Overload, Over temperature, Short circuit, Discharge, overcharge				
Function	Multi-Mode	Normal/ ECO/ CVCF				
	DC start	Yes				
	Programmable Outlet	Option				
Physical	Dimensions	440x88x390	440x88x475		440x88x600	
	(WxHxD, mm/inch)	17.3x3.5x15.4	17.3x3.5x18.7		17.3x3.5x23.6	
	Net Weight (kgs/lbs)	10/22.1	18/39.7		25/55.1	
Environmental	Operation Temperature	0~40°C / 32~104°F				
	Operation Humidity	20%~95%RH (Without condensing)				
	Altitude	1000m/3280ft without Derating				
	Noise Level	≤50dBA 1 meter front				
Interface	Standard	RS-232				
	Option	EPO, USB, Dry Contact Relay, SNMP/WEB Card				
	Compatible Platforms	Microsoft Windows series, Linux, Mac, etc.				
Standards and Certifications	Safety	EN62040-1				
	EMC	EN62040-2 (C2)				
	Marks	CE				

Battery Ban Specification

Contents	BC120241	BC0 04 1	BC120 21
Rated Battery Voltage	24	48	72
Number of batteries	12	8	12
Battery type	Lead Acid Maintenance Free 12V 7Ah		
Dimensions (WxHxD in mm/inch)	440x88x650 / 17.3x3.5x25.6		
Charging Capability	Optional Universal 200W Charger		

* Specifications subject to change without notice.

** Based on load percentage

*** Depending on the model and voltage, more information please contact with Ablerex

**** The same technical specification products could be sold as different model names in different countries, please consult Ablerex for more information.



ARES Plus RT Series

DSP-Controlled On-Line UPS

ARES PLUS RT 1000VA~3000VA



- True On-line Double Conversion Topology
- Advanced DSP Control Technology
- Rack / Tower Convertible
- 0.9 Output Power Factor
- Wide Input Voltage Range
- Active Harmonic Current Control
- LCD/LED Display
- Patent Backup Runtime Estimation
- Multiple Operation Mode
- Remote Emergency Power Off (REPO)
- Remote On Off control (ROO)
- Optional Programmable Outlets
- Easy Firmware Flash Upgrade



Specifications

Model	ARES PLUS RT 1000				ARES PLUS RT 2000				ARES PLUS RT 3000			
Input	Phase				Single + G				Single + G			
	Voltage Range**				110~300Vac				55~150 Vac			
	Frequency Range				45-65Hz (Auto sensing)				44-66Hz (Auto sensing)			
	Input Power Factor				≥0.99 100% linear load				≥0.99 100% linear load			
	Capacity**				1000VA/900W	2000VA/1800W	3000VA/2700W	1000VA/900W	1500VA/1350W	2000VA/1800W	3000VA/2700W	3000VA/2700W
Output	Output Voltage				220/230/240 Vac				100/110/115/120 Vac			
	Output Power Factor				0.9				0.9			
	Output Voltage Distortion				<3%	100% Linear load <7%	100% non-linear load	<3%	100% Linear load <7%	100% non-linear load	100% non-linear load	100% non-linear load
	Output Voltage Regulation				±1%				±1%			
	Frequency Range				±1Hz or ±3Hz (Selectable)				±1Hz or ±3Hz (Selectable)			
Efficiency	Crest Factor				3:1				3:1			
	Output Waveform				Pure Sine Wave				Pure Sine Wave			
	Line Mode				Up to 92%				Up to 92%			
	High Efficiency Mode				Upt to 97%				Upt to 97%			
	Capacity				12Vdc/7Ah				12Vdc/9Ah			
Battery	Battery Number				3	6	6	2	3	4	6	6
	Battery Voltage				36	72	72	24	36	48	72	72
	Recharge Time (to 90%)				4 hours				4 hours			
Display	LCD measures				Voltage / Frequency / Load level / Battery level / Output current / Estimated autonomy				Voltage / Frequency / Load level / Battery level / Output current / Estimated autonomy			
	Self-Diagnostics				Upon Power-on, Front Panel Setting / Software Control, 24 hours routine check				Upon Power-on, Front Panel Setting / Software Control, 24 hours routine check			
Alarm	Audible or Visual				Line Failure / Battery Low / Transfer to Bypass / System Fault				Line Failure / Battery Low / Transfer to Bypass / System Fault			
Protection	Full Protection				Overload, Over temperature, Short circuit, Discharge, overcharge				Overload, Over temperature, Short circuit, Discharge, overcharge			
	Multi-Mode				Normal/ ECO/ CVCF				Normal/ ECO/ CVCF			
Function	DC start				Yes				Yes			
	Programmable Outlet				Option				Yes			
	Dimensions				440 x 88 x 405	440 x 88 x 600	440 x 88 x 600	440 x 88 x 405	440 x 88 x 405	440 x 88 x 485	440 x 88 x 600	440 x 88 x 600
Physical	(WxHxD, mm/inch)				17.3x3.5x16.0	17.3x3.5x23.6	17.3x3.5x23.6	17.3x3.5x16.0	17.3x3.5x16.0	17.3x3.5x19.1	17.3x3.5x23.6	17.3x3.5x23.6
	Net Weight (kgs/lbs)				11.7/25.8	21.8/48.1	24.6/54.2	11/24.2	14.5/32	21/46	27/59.5	27/59.5
	Operation Temperature				0~40°C / 32~104°F				0~40°C / 32~104°F			
Environmental	Operation Humidity				20%~95%RH (Without condensing)				20%~95%RH (Without condensing)			
	Altitude				1000m/3280ft without Derating				1000m/3280ft without Derating			
	Noise Level				≤50dBA 1 meter front				≤50dBA 1 meter front			
Interface	Standard				RS-232, EPO				RS-232, USB, EPO			
	Option				USB, RS-485 (Modbus), Dry Contact Relay, SNMP/WEB Card				RS-485 (Modbus), Dry Contact Relay, SNMP/WEB Card			
	Compatible Platforms				Microsoft Windows series, Linux, Mac, etc.				Microsoft Windows series, Linux, Mac, etc.			
Standards and Certifications	Safety				EN62040-1				UL1778			
	EMC				EN62040-2 (C2)				FCC Class A			
	Marks				CE				cTUVus, FCC			

Battery Ban Specifications

Contents	BC06036	BC120 2	BC120 2	BC0 024	BC06036	BC0 04	BC120 2
Rated Battery Voltage	36	72	72	24	36	48	72
Number of batteries	6	12	12	8	6	8	12
Battery type****	12Vdc / 7Ah	12Vdc / 7Ah	12Vdc / 9Ah	12Vdc / 9Ah	12Vdc / 9Ah	12Vdc / 9Ah	12Vdc / 9Ah
Dimensions (WxHxD)	mm	440 x 88 x 430	440 x 88 x 581	440 x 88 x 430	440 x 88 x 430	440 x 88 x 430	440 x 88 x 581
	inch	17.3 x 3.5 x 16.9	17.3 x 3.5 x 22.9	17.3 x 3.5 x 16.9	17.3 x 3.5 x 16.9	17.3 x 3.5 x 16.9	17.3 x 3.5 x 22.9
Weight	kgs	20	34.2	27.2	21.8	27.2	37.8
	lbs	44.1	75.4	60	48.1	60	83.3

* Specifications subject to change without notice.

** Based on load percentage.

*** The same technical specification products could be sold as different model names in different countries, please consult Ablerex for more information.

**** Battery capacity can be changed



Mars RT Pro Series Convertible On-Line UPS

MP 1000VA~3000VA



- True On-line Double Conversion Topology
- Advanced DSP Control Technology
- 0.8 Output Power Factor
- Rack/Tower Design
- Wide Input Voltage Range
- Active Harmonic Current Control
- LCD/LED Display
- Multiple Operation Mode Supported
- Remote Emergency Power Off (REPO)
- Programmable Outlets



■ MP1000



■ MP2000



■ MP3000

Specifications

Model	MP1000		MP2000	MP3000
Input	Voltage			
	60/70/80~144 or 120/140/160~288Vac**			
	Frequency			
	50/60Hz ±5% (Auto Sensing)			
	Phase			
	Single Phase with Ground			
	Power Factor			
	>0.99(Full Linear Load)			
Output	Voltage			
	100/110/115/120/127 or 200/208/220/230/240			
	Capacity	1000VA / 800W	2000VA/1600W	3000VA/2400W
	Frequency (Synchronized Range)			
	3Hz or 1Hz (selectable)			
	Frequency (Battery Mode)			
	50Hz / 60Hz ±0.1% unless synchronized to line			
	Current Crest Ratio			
	3:1			
	Output Waveform			
Pure Sine Wave				
Transfer Time (AC to DC)				
0 ms				
Efficiency				
90% (Line mode)				
DC Start				
Yes				
Battery	Number of batteries		3	6
	Type			
	Sealed Lead Acid Maintenance Free			
	Capacity	12V/7Ah	12V/7Ah	12V/9Ah
	Rated Battery Voltage	36Vdc	72Vdc	72Vdc
Recharge Time (to 90%)				
3 hours				
Display	LED (Standard)			
	Normal, Battery, Bypass, Programmable Outlet 1, Programmable Outlet 2, Self-Test, Battery Weak			
	Bad, Site Wiring Fault , Fault, Overload, and Load/Battery Level conditions.			
Alarms	Self-Diagnostics			
	Upon Power On and Software Control			
	Button			
On button / Off button / Test / Alarm silence button				
Protection	Audible and Visual			
	Line Failure, Battery Low, Overload, System Fault Conditions			
	Overload			
	105% continuous, 120% for 30 sec. , 150% for 10 sec.			
	Short Circuit			
	Output Breaker/Electronic Circuit			
Physical	EPO			
	Output shutdown immediately			
	Over Temperature			
	AC Mode: Switch to Bypass ; Backup Mode: UPS shuts down immediately			
	Dimensions		440x88x405 (2U)	
	440x88x650 / 17.5x3.5x25.6 (2U)		440x176x405 / 17.3x6.9x16 (4U)	
	(WxDxH, mm/inch)			
	Outlet		6 x 5-15R	
Environmental	120Vac		2x5-15R + 2 x 5-20R	
	230Vac		4x5-15R + 1xL5-30R	
	6 x IEC320-C13		4 x IEC320-C13 1 x IEC320-C19	
	Operating Temperature		0~40°C / 32~104°F	
Interface	Noise Level			
	< 50dBA			
	Altitude			
	1000m / 3280ft without Derating			
Standard and Certifications	Humidity			
	20%~95%RH (Without condensation)			
	Interface Type			
	Standard: RS232 / USB / Communication Slot			
	Communication Slot Option			
	Relay Contact board, SNMP/WEB card			
	Compatible Platforms			
	Microsoft Windows series, Linux, Mac, etc.			
	Safety			
	EN62040-3 complied			
	EMC			
	EN62040-2, EN61000-3-2, EN61000-3-3, FCC Class A			
	Markings			
	CE, UL, cUL, FCC**			

Battery Ban Specifications

UPS model	Code	Bat. Type	Max. quantities	Dimensions (HxWxD mm inch)
MP 1000VA	C12M2U07	7AH	12	88x440x650 / 3.4x17.3x25.6
MP 2000VA	C12K2U07	7AH	12	88x440x650 / 3.4x17.3x25.6
MP 3000VA	C12K2U09	9AH	12	88x440x650 / 3.4x17.3x25.6
MP 1000VA	C12M2U07-C200****	7AH	12	88x440x650 / 3.4x17.3x25.6
MP 2000VA	C12K2U07-C200****	7AH	12	88x440x650 / 3.4x17.3x25.6
MP 3000VA	C12K2U09-C200****	9AH	12	88x440x650 / 3.4x17.3x25.6
MP 1000VA (ODIN)	C12M4U07	7AH	12	176x440x425 / 6.9x17.3x16.7
MP 2000VA (ODIN)	C12K4U07	7AH	12	176x440x425 / 6.9x17.3x16.7
MP 3000VA (ODIN)	C12K4U09	9AH	12	176x440x425 / 6.9x17.3x16.7

* Specifications subject to change without notices.

** Based on load percentage.

*** Depending on the model and voltage, please contact Ablerex for more information.

**** The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.

***** C200 means with 200W charger.



Mars III Series

Convertible Redundancy On-Line UPS

MSIII RT 4500VA~10000VA



- Rack/Tower Convertible Design
- Power Factor 1.0
- Patent Backup Runtime Estimation
- Flexible Battery Configuration
- Easy Parallel Installation
- Frequency Converter Operation Mode
- Smart ECO Mode
- Generator Compatible Mode
- Full-time Digital Signal Processor (DSP) Control
- LCD Mimic Panel
- Power Range and Runtime Scalability
- Optional Galvanic Isolation Transformer Module / MTBS Box



■ MSIII6000RT



■ MSIII10000RT 4U



■ MSIII400RT

Specifications

Model	MSIII4 00RT		MSIII6000RT		MSIII 000RT		MSIII10000RT	
Input	Phase		Single Phase with Ground					
	Voltage Range**		110Vac~280Vac					
	Frequency Range		45~70Hz (Auto Sensing)					
	Input Current Distortion		≤3%					
	Input Power Factor		≥0.99 Full Load					
Output	Capacity	4500VA/4500W	6000VA/6000W		8000VA/8000W		10000VA/10000W	
	Voltage		200/208/220/230/240Vac (240/208Vac+120Vac w/output transformer option)					
	Output Power Factor		1					
	Output Voltage Distortion		≤1% 100% Linear load		100% non-linear load with PF 0.9			
			≤3%					
	Output Voltage Regulation		±1%					
	Frequency Range (Synchronized Range)		±1Hz or ±3Hz (Selectable)					
	Crest Factor		3:1					
Efficiency	Output Waveform		Pure Sine Wave					
	Line Mode	93%				94%		
	High Efficiency Mode (ECO)		98%					
Battery	Number of Battery		12~20 (16/20 standard)		16~20 (20 standard)			
	Battery Type		Sealed Lead Acid Maintenance					
	Recharge Time (to 90%)		4 hours					
Display	Charger		2-mode operation, 2.1A(max.), Temperature compensation(Optional)					
	Status On LED + LCD		Line Mode, Backup Mode, ECO Mode, Bypass Supply, Battery Low, Battery Bad/Disconnect, Overload, and Transferring with interruption UPS Fault					
	Readings On LCD		Input Voltage, Input Frequency, Output Voltage, Output Current, Output Frequency, Load Percentage, Battery Voltage, Inner Temperature, Backup time estimation					
Alarm	Self-Diagnostics		Upon Power-on, Manual control by panel		communication, self routine check			
	Audible or Visual		Line Failure / Battery Low / Transfer to Bypass / System Fault					
Protection	Full Protection		Overload, Over temperature, Short circuit, Charging failure, Battery Disconencted					
	Multi-Mode		Normal/ ECO/ CVCF					
Function	DC start		Yes					
	Parallel capacity		up to 4 units					
	Parallel redundancy		3+1					
	Physical	Tower Mode	Dimensions (WxHxD, mm/inch)	290x788x645 / 11.4x29.5x25.4				
Net Weight(kg/lbs)			86/190		96/215			
RT Model		Dimensions (WxHxD, mm/inch)	2U: 440x88x680 / 17.3x3.5x26.8		3U: 440x132x680 / 17.3x5.2x26.8			
		Net Weight(kg/lbs)	24/52.9		45/99.2			
RT Model(w/B)		Dimensions (WxHxD, mm/inch)	4U: 440x176x680 / 17.3x6.9x26.8		6U: 440x264x680 / 17.3x10.4x26.8			
		Net Weight (kg/lbs)	52/115		96/212			
Environmental	Operation Temperature		0~40°C / 32~104°F					
	Operation Humidity		20%~95%RH (Without condensing)					
	Altitude		1000m/3280ft without Derating					
	Noise Level	≤55dBA	1 Meter			≤60dBA	1 Meter	
Interface	Standard		USB, EPO, Expansion slot					
	Protocol supported		-Bus, Modbus, SEC					
	Slot Option		RS232, RS485, Dry Contact Relay, SNMP/WEB Card					
	Compatible Platforms		Microsoft Windows series, Linux, Mac, etc.					
Standards and Certifications	Safety		EN62040-1, UL1778					
	EMC		EN62040-2, EN61000-3-2, EN61000-3-3, FCC Class A					
	Performance		EN62040-3					
	Marks		CE, UL, cUL, FCC, cTUVus					

**** The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.



Mars II Series

Redundancy On-Line UPS

MSII 4500VA~20000VA



- Simple Parallel Installation
- Full-time Digital Signal Processor Control
- Frequency Converter Operation Mode
- Smart ECO Mode
- LCD Mimic Panel
- Power Range and Runtime Scalability
- Maintenance Bypass Switch Embedded
- Optional Galvanic Isolation Transformer
- Optional Hot Swappable Battery



■ MSII 10000VA 3/1



■ MSII 15/20000VA

Specifications

Model	MSII4 00		MSII6000		MSII 000		000P		MSII10000		10000P		MSII 1 000		MSII 20000	
Input	Voltage		160~280Vac			160~280Vac(1Φ) / 277 ~485Vac(3Φ)**			277~485Vac(3Φ R, S, T, N)**							
	Frequency		45 ~ 65 Hz													
	Phase		Single, Line + Neutral + Ground			Single, Line + Neutral + Ground; Three, R, S, T + Neutral + Ground			Three + G							
	Power Factor		Up to 0.99 at Linear Load													
Output	Voltage		200/208/220/230/240Vac Selectable(208/120Vac optional)													
	Capacity		4050W		5400W		7200W		9000W		13500W		18000W			
	Frequency (Battery Mode)		±1Hz or ±3Hz (Selectable)													
	Current Crest Ratio		3:1													
	Harmonic Distortion		< 3% at Linear Load													
	Output Waveform		Pure sine wave													
	Transfer Time (AC to DC)		0ms													
	Efficiency		Up to 90% (Line Mode)										Up to 90% (without Transformer)			
Battery	DC Start		Yes													
	Number of batteries		20pcs													
	Type		Sealed Lead Acid Maintenance Free													
	Capacity		12V/7AH				12V/9AH				N/A					
	Rated Battery Voltage		240Vdc													
	Recharge Time + 90%		5 hours										N/A			
Display	Status On LED + LCD		Line Mode / Backup Mode / ECO Mode / Bypass Supply / Battery Low / Battery Fault / Overload / Transferring with interruption / UPS Fault													
	LCD		Input Voltage / Input Frequency / Output Voltage / Output Frequency / Load Percentage / Battery Voltage / Temperature													
Alarms	Self-Diagnostics		Upon Power-on / Front Panel Setting Software Control / 24-hour routine checking													
	Audible and Visual		Line Failure / Battery Low / Transfer to Bypass, System Fault Conditions													
Protection	Overload Capacity		Inverter Supply: 105%~150% for 160 seconds ~ 2 cycles before switching bypass. Bypass Supply: 105%~200% for 500 seconds ~8 cycles before stopping supply load.													
	Short Circuit		Output Breaker / Electronic Circuit													
	EPO		Output shutdown immediately													
	Over Temperature		Normal Mode : Transfer to Bypass Mode Battery Mode : UPS shuts down immediately													
	Physical	Dimensions		w/o transformer		290x748x645 / 11.4x29.5x25.4								290x748x645 / 11.4x29.5x25.4		
(WxHxD,mm/inch)		with transformer		290x748x645 / 11.4x29.5x25.4								290x1014x645 / 11.4x39.9/25.4				
Weight (kg/lbs)		Standard Unit/ (w/o transformer)		86/190		8K:87/192		10K:96/215		60/132						
(w/o transformer)		Standard Unit/ Hot Swappable unit		120/264		8K:92/202.4		10KP:101/223		130/286						
(with transformer)		Standard Unit/ Hot Swappable unit		120/264		8K:140/308		10K:149/327.8		130/286						
Environmental	Operating Temperature		0~40°C / 32~104°F													
	Noise Level (1m front)		<50dBA												<52dBA	
	Altitude		1000m / 3280ft without Derating													
	Humidity		20%~95%RH (Without condensation)													
Interface	Interface Type		Standard RS232 Interface													
	Communication Slots		2 nd RS232, USB, RS485, Relay Contact, SNMP/WEB Card, etc.													
	Compatible platforms		Microsoft Windows series, Linux, Mac, etc.													
Standard and Certifications	Safety		EN62040-1-1, UL1778												EN62040-1-1	
	EMC		EN62040-2, EN61000-3-2, EN61000-3-3, FCC Class A												EN62040-2	
	Markings		CE, cUL, UL ***												CE	

Battery Ban

UPS model	Code	Bat. Type	Max. quantities	Dimensions (HxWxD mm inch)
MSII 4500 / 6000VA	T40 07	7AH	40	290x748x631 / 11.4x29.4x24.8
MSII 4500 / 6000VA	T60 07	7AH	60	290x748x631 / 11.4x29.4x24.8
MS II 8000 / 10000VA	T40N 09	9AH	40	290x748x631 / 11.4x29.4x24.8
MS II 8000 / 10000VA	T60N 09	9AH	60	290x748x631 / 11.4x29.4x24.8
MSII15000VA / 20000VA	T60V 09	9AH	60	290x748x631 / 11.4x29.4x24.8
MSII15000VA / 20000VA	T40V 12	12AH	40	290x748x631 / 11.4x29.4x24.8

* Specifications subject to change without notice.

** Based on load percentage.

*** Depending on the model and voltage. Please contact Ablerex for more information.

**** The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.



Mars II Series

Convertible Redundancy On-Line UPS

MSII RT 4500VA~20000VA



- Simple Parallel Installation
- Full-time Digital Signal Processor Control
- Frequency Converter Operation Mode
- Smart ECO Mode
- LCD Mimic Panel
- Power Range and Runtime Scalability
- Maintenance Bypass Switch Embedded
- Optional Galvanic Isolation Transformer
- Optional Hot Swappable Battery



Specifications

Model	MSII4 00RT	MSII6000RT	MSII6000C	MSII 000RT 000PRT	MSII10KRT MSII10KRTP	MSII10000C	MSII 1 KRT	MSII20KP
Input	Voltage			160~280Vac		160~280Vac (1Φ) / 277		485Vac (3Φ)**
	Frequency			45 ~ 65 Hz				190Vac ~ 486Vac (3Φ)**
	Phase			Single + G		Single / Three + G		45 ~ 70Hz
	Power Factor			Up to 0.99 at Linear Load				Three + G
Output	Voltage			200/208/220/230/240Vac Selectable(208/120Vac optional)				Up to 0.95 at Linear Load
	Capacity			4050W	5400W	6300W	9000W	9000W
	Frequency (Synchronized Range)					±1Hz or ±3Hz (Selectable)		220/230/240Vac Selectable
	Frequency (Battery Mode)					±0.1% unless synchronized to line		
Battery	Current Crest Ratio					3:1		
	Harmonic Distortion					< 3% (at full linear load)		
	Output Waveform					Pure Sine Wave		
	Transfer Time (AC to DC)					0ms		
Display	Efficiency			90%				91%
	DC Start					Yes		
	Number of batteries			20pcs				16 or 20pcs
	Type					Sealed Lead Acid Maintenance Free		
Alarms	Capacity			12V/7AH	12V/5AH	12V/9AH		12V/9AH
	Rated Battery Voltage			240Vdc				192 or 240Vac
	Backup time			N.A.	N.A.	> 3 mins. ***	N.A.	N.A.
	Recharge Time			N.A.	N.A.	4 hours to 90%	N.A.	N.A.
Protection	Status On LED + LCD			Line Mode, Backup Mode, ECO Mode, Bypass Supply, Battery Low, Battery Bad/Disconnect, Overload, and Transferring with interruption		UPS Fault.		
	Readings on LCD			Input Voltage, Input Frequency, Output Voltage, Output Current, Output Frequency, Load Percentage, Battery Voltage		Inner Temperature.		
	Self-Diagnostics			Upon Power-on, Front Panel Setting		Software Control, 24-hour routine checking		
	Audible and Visual			Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions				
Physical	Overload Capacity			Inverter Supply: 105%~150% for 160 sec. ~ 2 cycles before switching bypass.		105%~150% for 600sec. ~ 1 sec.before switching bypass.		
	Short Circuit			Bypass Supply: 105%~200% for 500 sec. ~8 cycles before stopping supply load.		105%~150% for 600sec. ~ 1 sec.before stopping supply load.		
	EPO			Output Breaker/Electronic Circuit		Output shuts down immediately		
	Over Temperature			AC Mode: Switch to Bypass / Backup Mode: Switch off the UPS				
Environmental	Dimensions (WxHxD,mm/inch)			440x88x680/17.3x3.5x26.8 440x132x550 (ODIN) 17.3x5.2x21.6	440x176x680/ 17.3x6.9x26.8	440x132x680/ 17.3x5.2x26.8	440x264x680/ 17.3x10.3x26.8	440x220x720/ 17.3x8.6x28.3
	Weight(kg/lbs)			24/52.9 17.5/38.5 (ODIN)	52/114.6	45/99.2(8K/10KRT) 50/110.2 (8K/10KRTP)	96/211.2	36/79.2
	Operating Temperature					0~40°C/ 32~104°F		
	Noise Level					<50dBA		<60dBA
Interface	Altitude					1000m / 3280ft without Derating		
	Humidity					20%~95%RH (Without condensation)		
	Interface Type			Standard RS232		Standard RS232		EPO
	Communication Slots			2 nd RS232, USB, RS485, Relay Contact, SNMP/WEB Card				
Standards and Certifications	Compatible Platforms			Microsoft Windows series, Linux, Mac, etc.				
	Safety Standard			EN62040-1-1, UL1778				EN62040-1-1
	EMC Standard			EN62040-2, EN61000-3-2, EN61000-3-3, FCC Class A				EN62040-2
	Marks			CE, cUL, UL****				CE

Battery Bank Specifications

UPS mode	Code	Bat. Type	Max. quantities	Dimensions (HxWxD mm inch)
MSII RT 4500 / 6000VA	C20 3U07	7AH	20	132x440x680 / 5.2x17.3x26.8
MSII RT 8000 / 10000VA	C20N3U09	9AH	20	132x440x680 / 5.2x17.3x26.8
MSII RT 4500 / 6000VA (ODIN)	C20 4U07	7AH	20	176x440x550 / 6.9x17.3x21.7
MSII RT 8000 / 10000VA (ODIN)	C20N4U09	9AH	20	176x440x550 / 6.9x17.3x21.7
MSII RT 15000 / 20000VA	C20V3U09	9AH	20	132x440x680 / 5.2x17.3x26.8

* Specifications subject to change without notice.

** Based on load percentage.

*** Standard configuration - back-up time at 70% of the load.

****Depending on the model and voltage, please contact Ablerex for more information.

*****The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.



Automatic Transfer Switch

ATS & ITS Series

■ ATS 16A

■ ATS 32A

■ ITS Series

- Two Separate Independent Source
- Provide Redundant Power Supply
- Fast Automatic Switch Between Two Source
- High Reliability
- User Friendly Operation with LCD/LED Display
- Single Phase 16A / 32A
- 19 Rack Design
- Hot Swappable Maintenance Base (ITS)



■ ITS Maintenance Switch

Specifications

Model	ATS16A-230V		ATS32A-230V	ATS20A-120V	ATS30A-120V	ITS-232	ITS-232F	ITS-130	ITS-130F	
Input	Input Voltage	200/208/220/230/240 (±5%/10%/15%/20%)		100/110/115/120/127 (±5%/10%/15%/20%)		200/208/220/230/240 (±5%/10%/15%/20%)		100/110/115/120/127 (±5%/10%/15%/20%)		
	Acceptable Input Voltage	150Vac~300Vac		75Vac~150Vac		150Vac~300Vac		75Vac~150Vac		
	Input Frequency	50/60Hz(±5%/10%/15%/20%)					50/60Hz(±5%/10%/15%/20%)			
	Maximum Input Current	16A	32A	20A	30A	32A		30A		
Output	Output Voltage	200/208/220/230/240		100/110/115/120/127		200/208/220/230/240		100/110/115/120/127		
	Maximum output current	16A	32A	20A	30A	32A		30A		
	Transfer time(ms)	8~12ms (Sensitivity adjustable)					8~12ms (Sensitivity adjustable)			
	Efficiency	99%(with full linear load)					99%(with full linear load)			
Protection	Input	Circuit Breaker					Circuit Breaker			
	Output	Circuit Breaker					Circuit Breaker			
Interface	Communication	RS-232, USB, Dry contact and external slot for option card(SNMP, RS-485)					RS-232, USB, Dry contact and external slot for option card(SNMP, RS-485)			
	Display	LCD+LED					LCD+LED			
Physical	Inlet	IEC-C20 inlets x 2	40A terminal 3P x 2	NEMA 5-20 x 2	NEMA L5-30 x 2	40A terminal 3P x 2		40A terminal 3P x 2		
	Outlet	IEC-C13 x 8 IEC-C19 x 1	IEC-C13 x16 IEC-C19 x2	NEMA 5-15 x 8 NEMA 5-20 x 1	NEMA 5-15 x 16 NEMA L5-30 x 2	IEC-C13 x 8 IEC-C19 x 2	NEMA L6-30R x 2	NEMA 5-15 x 8	NEMA L5-30R x 2	
	Dimensions (W x H x D in mm/inch)	440x44x275 17.3x1.7x10.8	440x88x275 17.3x3.5x10.8	440x44x275 17.3x1.7x10.8	440x88x275 17.3x3.5x10.8	440x88x325 / 17.3x3.5x12.8				
	Net Weight (kg/lbs)	3.5 / 7.7	4 / 8.8	3.5 / 7.7	4 / 8.8	8 / 17.6				
Environment	Operating temperature	-5~40°C or 23~104°F		20%~95%RH (non-condensing)		-5~40°C or 23~104°F		20%~95%RH (non-condensing)		
	Standards compliance	Safety	IEC 60950-1		UL 60950-1/CAN CSAC22.2 No. 60950-1		IEC 60950-1		UL 60950-1/CAN CSAC22.2 No. 60950-1	
		EMC	EN 55022+EN 55024		FCC Part 15		EN 55022+EN 55024		FCC Part 15	

* Specifications subject to change without notice.

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External Bypass Switch Box



■ RacPDU-115A



■ RacPDU-120B



■ RacPDU-130H



■ RacPDU-210D



■ RacPDU-216G



■ MPDU-250

Maintenance Bypass PDU 15A ~ 50A

The maintenance bypass switch with power output distribution allows you to manually transfer the connected equipment from UPS output to utility power and vice versa. It is also a type of plug-and-play power output distribution for the MSRT Pro and Ares Series. With included brackets, you may install the unit in a Tower or Rack Mount configuration.

Model name	Rating	AC Input Plug (Receptacle)& cord length	Connect to UPS Input	Connection to UPS Output & cord length	Output Receptacles protection
RacPDU-11 A	120V 1KVA	NEMA 5-15P Attached 10-foot cord	NEMA 5-15P	NEMA 5-15P * 1 Attached 6-foot cord	NEMA 5-15R * 8
RacPDU-120B	120V 2KVA	NEMA 5-20P Attached 10-foot cord	NEMA 5-20P	NEMA 5-20P * 1 Attached 6-foot cord	NEMA 5-15R * 4
RacPDU-130H	120V 3KVA	NEMA L5-30P Attached 10-foot cord	NEMA L5-30P	NEMA L5-30P * 1 Attached 6-foot cord	NEMA 5-20R * 4
RacPDU-210D	230V 2KVA	N/A	IEC C14	IEC C14 * 1 Attached 6-foot cord	NEMA 5-20R * 6 with 20A circuit breaker * 2
RacPDU-216G	230V 3KVA	N/A	IEC C20	IEC C20 * 1 Attached 6-foot cord	NEMA 5-30R * 1
RacPDU-230F	230V 4.5K/6KVA	Terminal	NEMA L6-30R	Terminal	IEC C13 * 8
MPDU-2 0	230V 4.5K~10K	Terminal	Terminal	Terminal	IEC C19 * 2 IEC C13 * 6



■ TowPDU 2200

Parallel Bypass Box 60A-200A

The parallel maintenance bypass switch allows you to manually transfer the connected equipments from UPS output to utility power and vice versa. For different capacity of UPS in parallel, you may choose one of the appropriated models listed below considered to the total current. Included brackets allow the units to be installed in a Tower or Rack configuration.

Model name	Description	Dimensions(WxHxD mm inch)	Application
RacPDU-260	Max. 60A	440x176x124/17.3x7.0x4.9	Max. 2pcs 4.5K/6K or 1pc 8K/10K
RacPDU-2120	Max. 120A	440x176x124/17.3x7.0x4.9	Max. 4pcs 4.5K/6K or 2pcs 8K/10K
RacPDU-2200	Max. 200A	440x176x124/17.3x7.0x4.9	Max. 4pcs 8K/10K

UPS Accessories



■ Dry Contact Board (DCE-B)



■ Dry Contact Board (DCE-C)



■ USB Card



■ External Dry Contact Box (DCE-E)



■ 2nd RS232 Card



■ RS485 Card



■ SNMP Card

Communication Flexibility

We offer a complete set of communication solutions and accessories designed for different series of Ablerex UPS used in electrical and computer applications.

Dry Contact Board

For anus/ L Series, MSRT Pro, Ares, MSII and MSIII series

USB Card

For anus/ L Series, MSRT Pro, Ares, MSII and MSIII series

2nd RS232 Card

For anus/ L Series, MSRT Pro, Ares, MSII and MSIII series

RS4 Card

For MSII / MSIII in supporting -Bus/Mod-Bus applications



200W Charger

It provides 36~96Vdc Voltage adjustable features by jumper setting, which can be widely used in variable series of UPS models.

Optional External 1000W Charger

With its isolation conversion technology plus precision control, this charger provides 192/240Vdc which is suitable for the MSII/MSIII series, the optional charger may be installed in parallel up to 4 units.



Rail Kit

It can be widely used in supporting rack and convertible type UPS and battery banks in 19 rack system.

Enersine Active Power Filter



- True Harmonic Solution
- Compensate Up to the 51st Harmonics
- Power Factor Correction
- Correct Unbalance Three Phase Utility
- User Friendly HMI

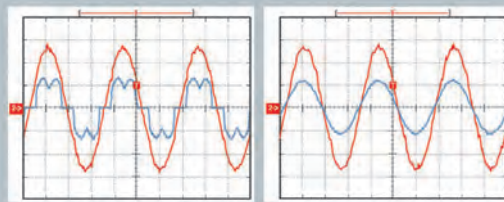
- A Enersine ESD34 30A Modular Series
- B Enersine ESD34 100A 150A Standalone Series
- C Enersine ESD34 100A 150A Open Chassis Series
- D Enersine Pro 80A Modular Series





True Harmonic Solution & Power Factor Correction

Enersine not only compensates harmonic current but also improves power factor. It will also correct for either a leading or lagging power factor.



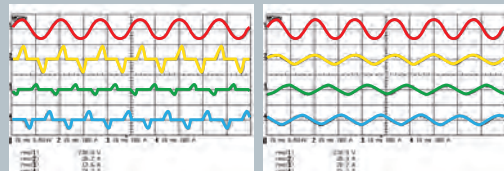
Before Enersine On
THDi% 30%, PF 0.81

After Enersine On
THDi% 4.3%, PF 1.0



Corrects Unbalance Three Phase Utility

Enersine also includes a load balancing function between phases and between phases and neutral.



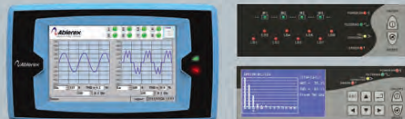
Before Enersine On

After Enersine On

User Friendly HMI

Enersine is equipped with a user friendly control panel. A simple On or Off function and features buzzer silence and system status indicators. The LCD control and display panel offers multiple advanced features.

- ▶ Complete with V I Fre . PF KVA THD parameters
- ▶ Waveforms and harmonic spectrum
- ▶ Control command
- ▶ Configure settings
- ▶ Status and alarms
- ▶ Event log



Specifications

Model	ESD34 30A	ESD34 100A&1 0A	Enersine Pro 0A
General	Equipment Storage Temperature		
	-20°C to + 70°C		
	Operating Temperature		
	-10°C to +40°C without derating		
	Relative Humidity		
	<95%		
	Operating Altitude		
Electrical	<1000 m without derating		
	Reference Harmonic Standard		
	EN61000-3-4, IEEE 519		
	Reference Design Standard		
	EN60146		
	Safety Standard		
	EN50178; UL508		
Communication	Electromagnetic Compatibility		
	EN61000-6-4, EN55011, CISPR 11, IEC 61000-3-12, IEC 61000-3-11, IEC 61000-6-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN 61000-4-8, EN61000-4-34		
	Input Voltage		
	400V +15%, -20%; 480V +10%, -20%		
	Phase/Wires		
	3 phase 4 wires/3wires		
	Frequency		
Physical	50/60±3 Hz		
	Harmonic Compensation		
	From 2nd to 51st order		
	Power Factor Correction		
	Both lagging and leading can be programmable.		
	Load Balancing		
	Both phase to phase and phase to neutral		
Physical	Response Time		
	<300us Global Mode		
	< 20 ms Selective Mode		
	Control Algorithm		
	CT at Source Side: Closed Loop Control		
	CT at Load Side: Open Loop Control		
	Parallel		
Physical	Up to 960A		
	Up to 1200A		
	Up to 1920A		
	Display		
	LED Panel or 4.3 Graphic LCD		
	7 Colorful LCD Touch Screen		
	Dry Contact		
Physical	3 Output Dry Contacts, 1 Input Dry Contact, 1 EPO		
	Communication		
	USB, RS-485 Modbus RTU Port, Ethernet Port		
	Software		
	ESD-Link34 Monitoring Software (Option)		
	Type		
	Modular Rack/ Wall Mount		
Physical	Standalone/Open Chassis		
	Modular Rack Mount		
	Dimensions (WxHxD,mm/inch)		
	CM: 440x710x86 /17.3x28x3.4 (2HU)		
	PM: 440x710x131/17.3x28x5.2 (3HU)		
	120A Frame: 600x1000x1500 / 23.6x39.4x59		
	240A Frame: 660x1000x1950 / 23.6x39.4x76.8		
Physical	Standalone (IP20):		
	600x600x1900 / 23.6x23.6x74.8		
	Open Chassis (IP00):		
	440x441x1500/17.3x17.4x59.1		
	CM: 440x630x86/17.3x24.8x3.4 (2HU)		
	PM: 440x630x176/17.3x24.8x6.9 (4HU)		
	320A Frame: 600x900x1500/23.6x35.4x59.1		
Physical	480A Frame: 600x900x1950/23.6x35.4x76.8		
	Weight (kg/lbs)		
	CM: 14/30.8		
	PM: 31/68.2		
	120A Frame(IP21): 146/321.2 (w/o PM)		
	240A Frame (IP21): 422.4/192 (w/o PM)		
	Standalone (IP20): 100A 195/429		
Physical	150A 205/451		
	Open Chassis (IP00): 100A 110/242		
	150A 120/264		
	CM: 10/22		
	PM: 43/94.6		
	320A Frame(IP21): 161/354.2(w/o PM)		
	480A Frame(IP21): 207/455.4(w/o PM)		

* Specifications subject to change without notice.

** Depending on the model and voltage, please contact Ablerex for more information.

*** The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.



Energolis Series Photovoltaic Inverter



- A Buck-1000W / Buck-1500W
- B Energolis ES3000HC~ES4600HC
- C Energolis ES6000HC~ES12000HC
- D Energolis ES25600HC

EnerSolis Series Grid-Connected Single Phase

ES3000HC~ES4600HC



- Compact Size Low Weight
- User Friendly LCD Display
- Uses High MTBF Component
- Convection Cooling (Fan-less)
- Intelligent DSP Controller
- Protection Class IP65
- Wide MPPT Range of 150 to 450 Vdc
- Intelligence MPPT Technology
- Anti-islanding Technology
- RS485 Communication
- De-rating Function
- High MPPT Tracker Efficiency
- Easy Installation

Specifications

Model	ES3000HC	ES36 0HC	ES4000HC	ES4600HC
Item	Inverter Technology		Conversion Mode	
			Sine-wave, Current source, High frequency PWM	
	Isolation Method		Transformer-less Design	
DC Input Data	Nominal DC Voltage		370 VDC	
	Max. DC Input Voltage		500 VDC	
	Working Range		120VDC~500VDC*	
	Max. DC Input current	7.9 Amp	9.7Amp	10.5 Amp
	MPPT Range		150 VDC ~ 450 VDC	
Efficiency Data	MPPT Tracker		2	
	Max. Efficiency		>97.2%	
	Euro Efficiency		>96%	
	CEC efficiency		>96%	
Environmental	Operating Temperature		-25°C ~ +50°C / -13°F~122°F	
	Humidity		0 to 90%(Without condensation)	
	Altitude		0 ~ 2000 M / 0 ~ 6600 ft	
Mechanical	Dimensions (WxHxD,mm/inch)		439x531x157 / 19.4x20.9x6.2	
	Weight (kg/lbs)		20 / 44	
	Protection Class		IP65, outdoor	
	Cooling		Convection	
	AC Connection		Screw Terminals	
Communication	DC Connection		MC4	
	Communication Interface		Standard : RS485 Optional: USB, Dry contact, WiFi, TCP/IP	
Front Panel	LCD		Boost input Voltage/Boost input Current/Boost input Power/AC output Voltage /AC output frequency/AC output current / AC output power/AC Energy yield/Inner Temperature/Heat sink Temperature /Status message/ Error message	
	LED		Leakage current fault or DC input isolation fault	
			Spec. of Utility is not matches with the Utility specifications of the inverter	
			Solar Cell power is greater or smaller than sleep power	
	Key Pad		UP key/ Down key/ Function key/ Enter key	
Protection	Utility		Over/under Voltage, Over/under Frequency,	
			Ground fault, DC Isolation fault	
	Islanding operation detection		Passive : Voltage phase jump detection	
			Active : Reactive power control	
Certification	Over Temperature		Reduced output power	
	On-Gird Performance		VDE0126-1-1/A1, VDE-AR-N 4105	
	Safty		IEC 62109-1, IEC 62109-2 , IEC 60730-1	
	EMI/EMC		EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12	

* Specifications subject to change without notice.

** Depending on the model and voltage, please contact Ablerex for more information.

*** The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.



EnerSolis Series Grid-Connected Three Phase

ES6000HC~ES12000HC



- Three-phase Inverter
- Acceptable Input Voltage up to 1000 Vdc
- Transformer-less Topology
- Maximum Efficiency 97.6%
- Protection Class IP65
- Dual Independent MPP Trackers
- Intelligent MPPT Technology
- Active and Passive Anti-islanding Technology
- Compact Design
- User Friendly LCD Display
- High MTBF Components
- Temperature-dependent Fan Cooling
- Integrated DC Switch
- High Performance DSP Controller
- Built-in RS485 Communication Port
- Firmware Upgradability
- Wide MPPT Voltage Range with Nominal Power
- Allowable De-rating Operation
- Maximum Output Power Clamping
- Multi-Operation Mode
- Multi-Country Certifications

Specifications

Model	ES6000HC		ES 000HC	ES10000HC	ES12000HC
Input	Inverter Technology	Conversion Mode	Sine-wave, Current source, High frequency PWM		
		Isolation Method	Transformer-less Design		
DC Input Data	Nominal DC Voltage	620 Vdc			
	Max. DC Input Voltage	1000 Vdc			
	Working Range	300 ~ 1000 Vdc			
	Max. DC Input current	2 x 8.5 Amp	2 x 11.4 Amp	2 x 14.3 Amp	2 x 14.3 Amp
	MPPT Range (Nominal Output)	370 ~ 850 Vdc			450 ~ 850 Vdc
	MPPT Tracker	2			
AC Output Data	Nominal AC Power	6,000 Watt	8,000 Watt	10,000 Watt	12,000 Watt
	Max. AC Apparent Power	6,600 VA	8,800 VA	11,000 VA	12,000 VA
	Nominal AC Voltage	AC 230V 3			
	Output Connect Method	3-Phase / 4-Wires (L1, L2, L3, N, PE)			
	AC Voltage Rang	184V ~ 264.5V (Base on 230 Vac)			
	Nominal AC Current	8.69Amp 3	11.59Amp 3	14.49Amp 3	2 x 17.39 Amp
	Frequency	50/60Hz Auto-Selection (47.5 ~ 51.5Hz or 59.3 ~ 60.5Hz)			
	Power Factor	Leading 0.9 ~ Lagging 0.9			
	Current Distortion	Total Harmonic current : Less than 5% Single Harmonic current : Less than 3%			
	Efficiency Data	Max. Efficiency	97.60%		
	Euro Efficiency	96.20%	96.60%	97.00%	97.25%
Environmental	Operating Temperature	-20 °C ~ +60 °C (-4 °F ~ 139 °F)			
	Pollution degree classification	PD3			
	Overvoltage category (IEC 60664 - 1)	DC side	Category II		
		AC side	Category III		
	Humidity	0 to 100% (Without condensation)			
	Altitude	0 ~ 2000 m / 0 ~ 6600 ft			
Mechanical	Dimensions (H x W x D mm /in)	595 x 451 x 247 / 23.4" x 17.7" x 9.72"			
	Net Weight (kg / lbs)	41 / 90.4			
	Gross Weight (kg / lbs)	44 / 97.0			
	Protection Class	IP65, outdoor			
	Cooling	Temperature-dependent fan			
	AC Connection	Connector			
	DC Connection	MC4			
Communication	Communication Interface	Standard	RS485		
		Optional	USB, RS485, Dry contact, TCP/IP		
Front Panel	LCD	Boost input Voltage · Boost input Current · Boost input Power · AC output Voltage · AC output frequency · AC output current · AC output power · AC Energy · yield · Inner Temperature · Heat sink Temperature · Status message · Error message			
	LED	RED	On: Ground fault or DC input insulation fault		
		Yellow	On: Unit Error or Alarm		
		Green	Flash: Standby or Sleeping mode On: Normal Operation		
	Key Pad	UP key/ Down key/ Function key/ Enter key			
Protection	Utility	Over/under Voltage, Over/under Frequency, Ground fault, DC Isolation fault			
	Islanding operation detection	Passive : Voltage phase jump detection Active : Reactive power control			
	Over Temperature	Downgraded output power			
	On-Grid Performance	VDE 0126-1-1, VDE AR-N 4105, AS 4777.2/3, ENEL 2010,			VDE 0126-1-1, VDE AR-N 4105
Certification	Safety	EN 62109-1, EN 62109-2, EN 60730, AS 3100			EN 62109-1, NE 62109-2, EN 60730
	EMI/EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3			EN 61000-6-2, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3

* Specifications subject to change without notice.

** Depending on the model and voltage, please contact Ablerex for more information..

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EnerSolis ES2 600HC

Grid-Connected Three Phase

ES25600HC



- High Maximum Efficiency up to 98.1%
- Wide Input Voltage range 300~1000Vdc
- Dual Independent MPP Trackers
- High Performance DSP Controller
- Integrated DC Switch
- Protection Class IP65
- Automatic Convection Cooling Switch
- Compact Design and Easy to Install
- User Friendly LCD Display
- Built-in RS485 Interface Port
- TUV Rhineland Product Safety Certified
- EnerSolis Cloud-based Monitoring and Maintenance Platform

Model	ES25600HC	
Inverter Technology	Conversion Mode	Sine-wave, Current source, High frequency PWM
	Isolation Method	Transformer-less Design
DC Input Data	Nominal DC Voltage	620 Vdc
	DC Voltage Range	300Vdc~1000Vdc
	Max. Input Current	22.7Amp
	MPPT Voltage Range	370Vdc~950Vdc
	Number of MPPT	2
	Module Capacity	1.2 times (Max.)
AC Output Data	Nominal AC Power	25600VA/25600W
	Nominal AC Voltage	220/380 or 230/400 Vac
	Output Wiring	3 Phase 4 Wires (L1,L2,L3,N,PE)
	Nominal AC Current	37.1 Amp x 3
	Frequency	50 or 60 Hz (Selectable)
	Power Factor	0.8 leading ~ 0.8 lagging
	Current Distortion	Total Harmonic current: Less than 5%
Frequency	Peak Efficiency	>98.1%
Environment	Operation Temperature	-25°C ~ 60°C
	Humidity	0 ~ 100% (non-condensing)
	Altitude	0 ~ 2,000m
Physical	Dimension (WxDxH)	457 x 279 x 805mm
	Weight	62Kg
	Protection Class	IP65, outdoor
	Cooling	Convection cooling
Interface Ports	Standard	RS485
	Optional	USB, Dry Contact, TCP/IP
Protection	Utility	Over/under Voltage, Over/under Frequency, Ground Fault, DC Isolation Fault
	Islanding operation detection	Passive: Voltage phase jump detection Active: Reactive power control
	Safety	EN 62109-1, EN 62109-2
	Grid	VDE-AR-N 4105
Certifications	EMC/EMI	EN61000-6-2, EN61000-6-4
	Harmonics	IEEE-519-1992
	Waterproof	CNS 14165

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EnerSolis Series Off-Grid Photovoltaic Charger

Buck-1000W/Buck-1500W



- Universal for 12,24,36 and 48 Battery System
- Board Input Range for Various PV Modules
- Integrated MPPT Technology
- Three-Stage Fast Charge
- Operates in Harsh Ambient Temperatures
- LCD/LED Operational Interface



Specifications

Model	Buc -1000W		Buc -1 00W	
Input	Voltage	40V~120V		
		40~120V	12Vbat	
		40~120V	24Vbat	
	MPPT Range / Operating Voltage	50~120V	36Vbat	
		60~120V	48Vbat	
	Current(Max.)	25A		35A
Output	Max. PV Array Open Circuit Voltage	150Vdc		
	Nominal Battery Voltage	12/24/36/48Vdc		
	Max. Charger/Output Current	40A		60A
	Max. PV Array Power	1000W		1500W
	Ripple Voltage	<±1V		
	Max. Efficiency	95%		
Charge mode	Bulk/Pulse/Float1/Float2 or Bulk/Float1/Float2			
Display	Status on LCD	Solar Cell Input Voltage / Solar Cell Input Current/Solar Cell Input Power / Bat. Voltage /Bat. Current /Bat. Ampere-hours/ IGBT temperature /Bat. temperature/Voltage setting table, etc.		
	Status on LED	Normal/Fault/PV Low		
Protection	Overload	>110% shutdown		>105% shutdown
	Short Circuit at load side	Output current>60A shutdown		
	Solar Cell Polarity Error Protection	Yes		
	Battery Temperature Compensation(Optional)	(-3.3mV/ /cell)		
	Standby Power Consumption	0W		
	Total Power Consumption while operating	3.5W		
Alarms	Visible	Fault, PV Low, Bat. Abnormal, etc.		
Physicals Characteristics	Mechanical Dimensions WxHxDmm	165x330x85mm		
	Input/Output Connectors	Hardwire(Terminal Block)		
	Enclosure Type	IP20		
	Net Weight(Kgs)	3.2		
Environment	Operating Temperature	-20°C to +60°C		
	Storage Temperature	-40°C to +85°C		
	Altitude	0-2000M up to 60 ; 0~3000M up to 55		
	Humidity	100% RH Maximum, No Condensing		
Interface Computer	Type	Standard RS232		
Compliance	uality	ISO9001		
	Standard EMC	EN61000-6-1, EN61000-6-3		
	Marking	CE		
Patent Pending		Taiwan: 97147246		
	Patent No.	China: 200810180491.7		
		USA: 12/273,669		

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OF POWER ELECTRONICS

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