



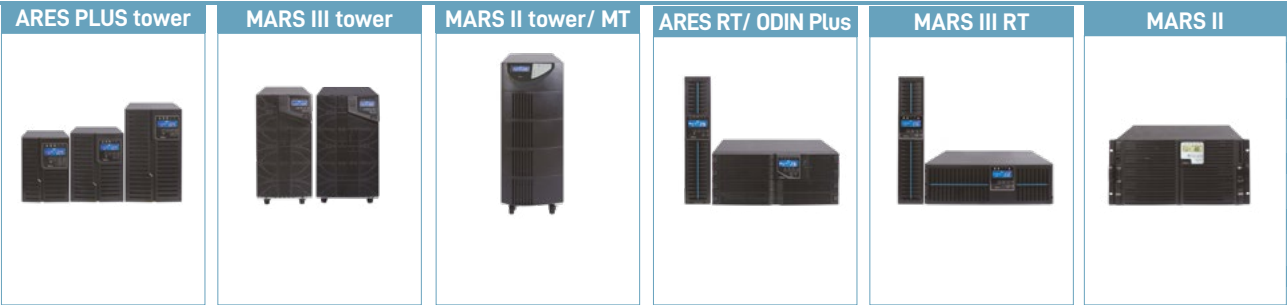
EMEA CATALOGUE



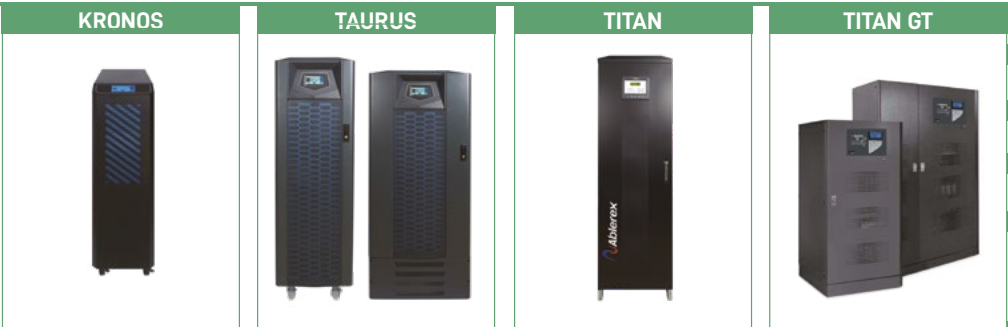
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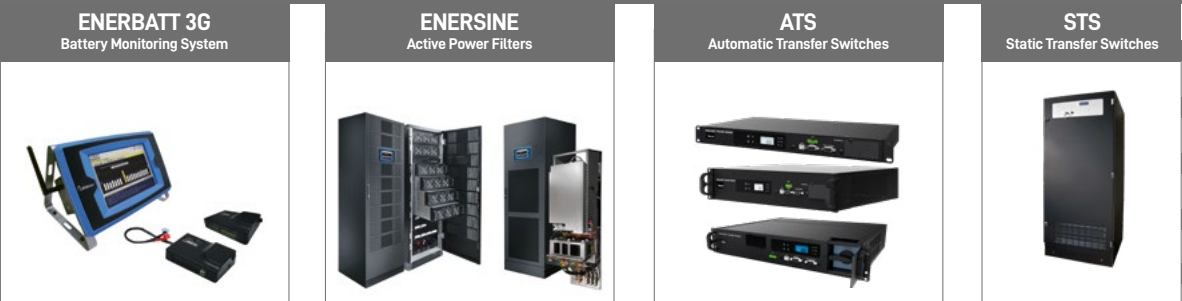
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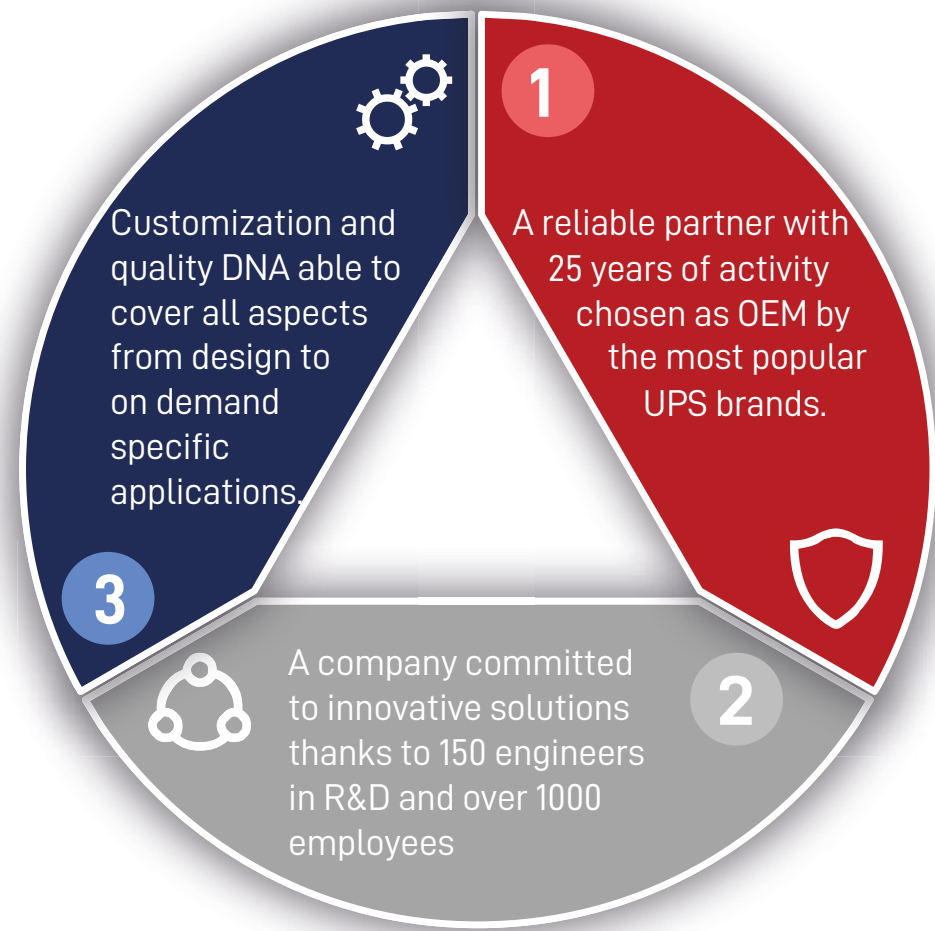


Founded in 1994, AblereX is a multinational manufacturer expert in power conversion, ISO 9001 and 14001 certified the company has a strong commitment to creating and building innovative electronic power products to ensure power reliability, quality and continuity.

Thanks to its manufacture and facilities distributed all over the world, more than 150 engineers and 1000 employees, AblereX is able to guarantee the best value solutions for all market needs covering various applications from home and small office, mission critical It infrastructure, industrial process, telco to tertiary and multi-language sales and technical support.

Focused on research and development, the company has more than 100 advanced patents and has obtained the most important safety certifications such as CE, LVD, EMC and RoHs.

AblereX reported sales of over 70€ million in 2019



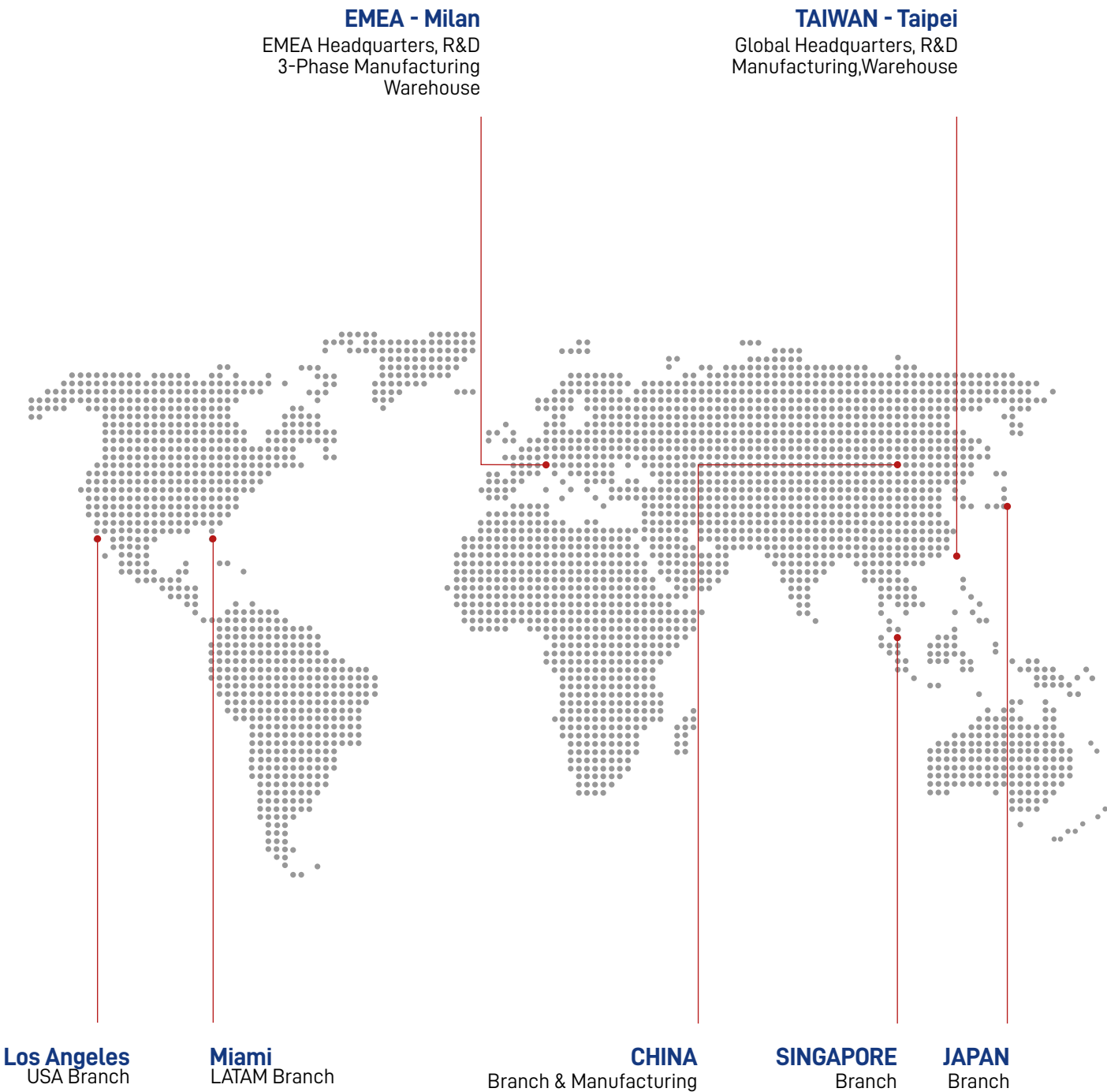
Training facilities and demo room	3-Phase UPS Manufacturing	Central European warehouse close to Venice for fast and optimized delivery without MOQ	Multi language sales and technical team working in your time zone (7 days a week)	Customization service from product and packaging to all documentation
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The headquarters for Europe, Middle-East and Africa (EMEA) is based in Italy where a multi languages sales and technical team are able to guarantee fast deliveries, on-site and virtual training, customization and logistic support in your time zone.

By choosing AblereX for your power protection and critical load solutions, you choose a multinational company able to ensure your customers' satisfaction over time and offer a support to increase your business and efficiency.

OUR ORGANIZATION

Ablerex is a multinational that covers all geographical areas.
Our office in Milan, Italy, is the HQ of the EMEA area
(Europe, Middle-East and Africa)



VERTICAL APPLICATIONS

Ablerex covers various vertical applications by a complete and unique portfolio of solutions suitable for every need

DOMESTIC and SMALL OFFICE



Glamor - Glamor S
Ares RT Plus / Ares Plus

TERTIARY



Odin Plus - Ares RT Plus / Ares Plus
Mars III - Kronos - Taurus

ICT



Odin Plus - Ares RT Plus / Ares Plus
Mars III - Kronos - Taurus - Titan

INDUSTRY



Ares RT Plus / Ares Plus - Mars III
Taurus - Titan - Titan GT

UPS FOR SPECIFIC APPLICATIONS

CABINET CONTROL (PLC)



Ares Plus - UPS Single Phase
1000-3000 VA

Whenever you need a constant battery power reserve Ablerex has a solution. Thanks to Ablerex firmware you can be sure that the Ups has always enough battery reserve to be switched on and to supply the load.

BENEFITS

- Free included function very easy to implement
- Reserve battery level can be easily customized
- Ability to use the reserve battery power needed
- Maximize battery protection and life expectancy

APPLICATIONS

- Cabinet control (PLC)
- Medium voltage station

For technical specification see pages 20-21, 26-27

REMOTE ON/OFF W/O MAINS



Ares Plus- UPS Single Phase
1000-3000 VA

In case of electrical shutter is protected by an UPS and for some reasons the mains circuit breaker has been tripped or the local grid is down, the shutter cannot be opened. Thanks to the option "remote on/off without mains" Ablerex UPS can be turned on even if the mains is absent.

BENEFITS

- Option under request easy to implement
- Reduce TCO avoiding to oversize UPS and batteries to support long energy absence (e.g. closing of activities during the weekend)
- Maximize battery protection and life expectancy

APPLICATIONS

- Store, bar, restaurant, bank or service shop electrical shutter
- Warehouse electrical shutter
- Electric doorway shutter

For technical specification see pages 20-21

HARSH ENVIRONMENT



Ares Plus RT HARSH and Odin PLUS HARSH
UPS Single Phase
1000-3000 VA

When the need is to prevent service disruption and ensure safety and continuity in a harsh environment a robust and highly reliable UPS is required. Ablerex Harsh UPS 's have been built to guarantee efficiency and performance from -10 °C to 55°C (-5 °C with LCD)

BENEFITS

- Protection of the load at extreme temperature from -10 °C to 55°C
- Batteries designed for extreme temperatures

APPLICATIONS

- Industrial environment
- IT
- Wind farm
- Telco base transceiver station
- All applications in Geo harsh areas
- Underground transportation
- Traffic control

ELECTRICAL MOTORS AND LIFT



Taurus GLM – UPS 3Phase 10-80kVA

With Ablerex GLM (Generative Load Management) patented solution, the energy generated by a braking motor (e.g. lift) is used either to feed other parallel loads or to charge batteries. The GLM function never leaves the load unprotected and dramatically reduces the energy bill.

BENEFITS

- Free included function easy to implement
- Dramatically reduces energy cost
- Reduce TCO avoiding the need to oversize UPS and batteries to support energy feedback
- Maximize battery protection and life expectancy
- Contribute for a better planet by minimizing energy losses and by recycling energy

APPLICATIONS

- Industrial application (e.g. crane, CNC machines, flexo printers, etc)
- Braking lift
- Tower crane
- Electro-medical equipment (e.g. computed tomography, etc)
- Radar

For technical specification see pages. 36-37

GENERATORS



Kronos-Taurus-Titan-Titan GT Ups
Three Phase
10-800kVA

UPS is often installed downstream of generators. This type of power source has some peculiarities: fluctuation of the frequency and voltage values, polluted waveform, difficulty in managing the load steps. Ablerex, always attentive to the needs of the market, has developed all its UPS in order to correctly manage these sources, without the need to oversize them.

BENEFITS

- Free included function easy to implement
- Dramatically reduce energy cost
- Reduce TCO avoiding the need to oversize UPS and batteries to absorb energy feedback
- Maximize battery protection and life expectancy
- Avoid overloading the generator during battery charge procedure

APPLICATIONS

- All applications where supply must be on line 24/7 working with generators
- Geo area where generator is needed
- IT-TelcoMedical equipment
- Industrial Automation

For technical specification see pages 34-41

CENTRAL POWER SUPPLY SYSTEM (COMPLIANT EN 50171)



EN 50171 is the reference standard required by law for all safety installations e.g. emergency lighting systems in any public, commercial or residential building. Ablerex solutions are fully designed in compliance with EN50171 in order to guarantee the maximum extent of protection in the critical environments.

BENEFITS

- Fire resistant
- Low maintenance costs (easy set up and no need of high frequency periodical checks)
- High flexibility thanks to 4 operating modes
- Never stop: can work continuously with an overload up to 120%
- Battery protection against reversed polarity
- Long battery life: 10 years

APPLICATIONS

- All safety installations in high-risk areas
- Emergency lighting,
- Fire extractors and automatic fire extinguisher systems
- Smoke extraction equipments
- Pager and safety signaling systems
- Carbon monoxide detection systems

ONE MANUFACTURER FOR EVERY NEED

Ablerex product range is complete from every point of view. Next to the availability of UPS of all technology and power, produced in our factories, we offer products equally important in every installation where the quality of energy is a priority: active filters, Battery Monitoring System, Static Switches... **A single manufacturer for every need!**

Line interactive UPS

450VA ~ 3000VA

Tower

Glamor
450-2000VA



Glamor S
600-2000VA



Janus
750-3000VA




Single phase online UPS


1000VA ~ 20000VA

Tower


Ares Plus
1000-3000VA



Mars III
6000-10000VA




Mars II - Mars II MT
10000-20000VA




Convertible Rack/ Tower


Ares RT/ Odin Plus
1000-3000VA



Mars III RT
6000-10000VA



Mars II RT
10000-20000VA



Three Phase UPS

10kVA ~ 800kVA

Tower

Kronos
10-40kVA



Taurus
10-80kVA



Titan
100-500kVA



Titan GT
100-800kVA





Battery Monitoring

Wireless

Enerbatt 3G



Active Power Filter

Modular

Enersine



Cabinet



Transfer Devices

Single Phase

ATS



Three Phase

STS



LINE INTERACTIVE UPS



GLAMOR

The power of experience

450VA ~ 850VA



GLAMOR

The power of experience

1000VA ~ 2000VA



GLAMOR S

Pure sinewave protection
for IT loads

600VA ~ 2000VA



JANUS

Pure sinewave protection
in a rack/tower UPS

750VA ~ 3000VA



GLAMOR

THE POWER OF EXPERIENCE

450VA ~ 2000VA

Based on more than 20 years of experience in line-interactive technology, GLAMOR combines the most up-to-date technologies and the highest reliability of the market.



PERFECT FOR:



Home



Shops



PC & Networks



Small Offices

FEATURES

- Line-interactive simulated sinewave UPS
- Integrated Voltage Regulator (AVR) for sags, spikes, under and over voltages
- Cold start to switch on the UPS without mains
- Wide input voltage and frequency range, for a longer battery life
- Easy battery replacement
- Plug-in charging - UPS charging battery even when turned off
- Automatic battery test
- Smart battery management system enhancing battery life
- Downloadable monitoring software (Emily) that protects your PC by safe shutdown procedure and provides event-data log
- USB connection port
- 2 years EU warranty on UPS

OPTIONS

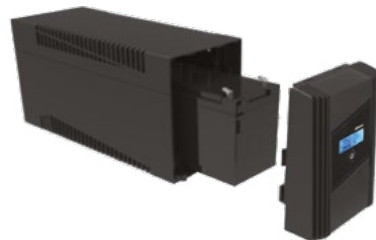
- Communication cable
- Carton gift box customization
- RS232 Port
- Many front and back panel customization possibilities
- RJ45 surge protection for telephone lines

WHAT'S IN THE BOX

- Input power cable
- Output power cable

EASY BATTERY REPLACEMENT

GR 450-650-850



GR 1000-1500-2000

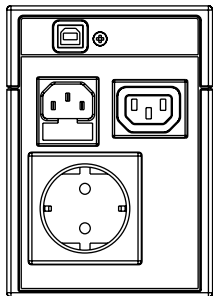


SPECIFICATIONS

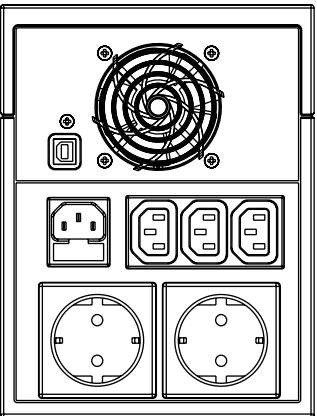
MODEL		GR450 LCD	GR650 LCD	GR850 LCD	GR1000 LCD	GR1500 LCD	GR2000 LCD
INPUT	Voltage Range	160Vac~290Vac					
	Frequency Range	45~65Hz (Auto sensing)					
	Phase	Single Phase					
OUTPUT	Capacity	270W	380W	500W	600W	900W	1200W
	Output Voltage (Battery mode)	220/230/240Vac ±10%					
	Frequency Range (Battery mode)	50/60Hz ±1Hz					
	Transfer Time	2~6ms (typical)					
	Output Waveform	Simulated SineWave					
PHYSICAL	Dimension (WxHxD, mm)	100 x 140 x 292			148 x 198 x 315		
	Net Weight (kg)	4	5	5.5	9	10.5	11.8
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	AC mode, AVR mode, battery mode, battery level, load level, input voltage, output voltage, fault and battery weak					
ALARM	Audible or Visual	Battery mode/ battery low/ overload/ system fault					
PROTECTION	Full protection	Overload, short circuit, discharge, overcharge and optional RJ-11/RJ-45 surge protection					
FUNCTION	DC Start	Yes					
	Plug-in charging	Yes					
ENVIRONMENT	Operation Temperature	0~40°C					
	Operation Humidity	0%~90% (without condensing)					
	Altitude	1000m without derating					
	Noise Level	≤ 40dB					
INTERFACE	Interface	USB (optional RS232)					
	Compatible platforms	Microsoft Windows series, Linux, Mac					
STANDARDS & CERTIFICATIONS	Safety & EMC	IEC EN 62040-1, IEC EN 62040-2					
	Performance	IEC EN 62040-3					
	Marks	CE					

BACK PANELS

GR 450/650/850



GR 1000/1500/2000



GLAMOR S

PURE SINEWAVE PROTECTION FOR IT LOADS

600VA ~ 2000VA

Thanks to its pure sinewave output, GLAMOR S is the best choice for small sensitive IT loads with PWM technology.



PERFECT FOR:



Routers



Gaming



Shops



Sensitive IT loads

FEATURES

- Pure sinewave output
- Increases servers power supply life span
- Integrated voltage regulator (AVR) for sags, spikes, under and over voltages
- Cold start to switch on the UPS without mains
- Wide input voltage and frequency range, for a longer battery life
- Easy battery replacement
- Automatic battery test
- Smart battery management system enhancing battery life
- Downloadable monitoring software (Emily) that protects your PC by safe shutdown procedure and provides event-data log
- USB connection port and RJ45 surge protection for telephone lines
- 2 years EU warranty on UPS

OPTIONS

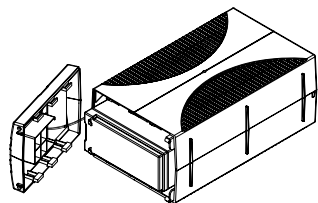
- Communication cable
- RS232 Port
- Many front and back panel customization possibilities

WHAT'S IN THE BOX

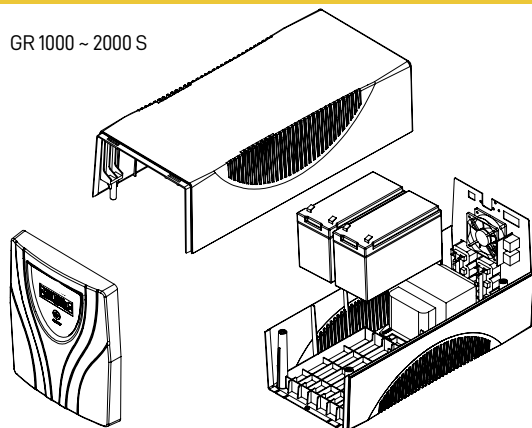
- Input power cable
- Output power cable
- USB cable

EASY BATTERY REPLACEMENT

GR 600 ~ 800 S



GR 1000 ~ 2000 S

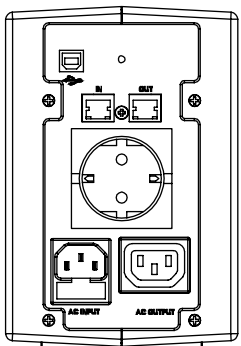


SPECIFICATIONS

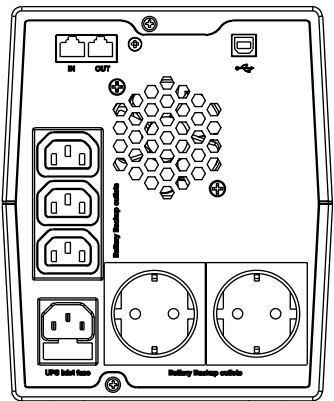
MODEL		GR600S LCD	GR800S LCD	GR1000S LCD	GR1500S LCD	GR2000S LCD
INPUT	Voltage Range	165Vac~290Vac				
	Frequency Range	45~65Hz (Auto sensing)				
	Phase	Single Phase				
OUTPUT	Capacity	420W	560W	700W	1050W	1400W
	Output Voltage (Battery mode)	220/230/240Vac ±10%				
	Frequency Range (Battery mode)	50/60Hz ±1Hz				
	Transfer Time	2-6ms (typical)				
	Output Waveform	SineWave				
PHYSICAL	Dimension (WxHxD, mm)	116 x 170 x 309			165 x 198 x 393	
	Net Weight (kg)	4	5.5	9.3	12.4	12.6
BATTERY	Type & Number	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	AC mode, AVR mode, battery mode, battery level, battery voltage, load level, input voltage, output voltage, fault and battery weak				
ALARM	Audible or Visual	Battery mode/ battery low/ overload/ system fault				
PROTECTION	Full protection	Overload, short circuit, discharge, overcharge and RJ-11/RJ-45 surge protection				
FUNCTION	DC Start	Yes				
	Plug-in charging	Yes				
ENVIRONMENT	Operation Temperature	0~40°C				
	Operation humidity	0%~90% (without condensing)				
	Altitude	1000m without derating				
	Noise Level	≤ 40dB			≤ 45dB	
INTERFACE	Interface	USB (optional RS232)				
	Compatible platforms	Microsoft Windows series, Linux, Mac				
STANDARDS & CERTIFICATIONS	Safety & EMC	IEC EN 62040-1, IEC EN 62040-2				
	Performance	IEC EN 62040-3				
	Marks	CE				

BACK PANELS

GR 600 ~ 800 S



GR 1000 ~ 2000 S



JANUS

PURE SINEWAVE PROTECTION IN A RACK/TOWER UPS

750VA ~ 3000VA

JANUS is the solution when a pure sinewave protection for an IT load is required. Its rack/tower design gives the maximum flexibility for any kind of installation.



PERFECT FOR:



Routers switch



Shops



Small offices



Servers

FEATURES

- Pure sinewave UPS
- Rack/tower convertible design
- From 750VA to 3000VA with 0.9 output power factor
- State of the art rotating LCD panel
- 95% high efficiency in utility mode
- Automatic voltage regulation
- Hot swappable battery function
- Customer options slot for increased flexibility
- RS232 and USB communication ports
- Smart Fan Operation
- EPO - Emergency Power Off
- Cold start
- Monitoring Software (Emily) with event-data log, to protect your PC by shutdown

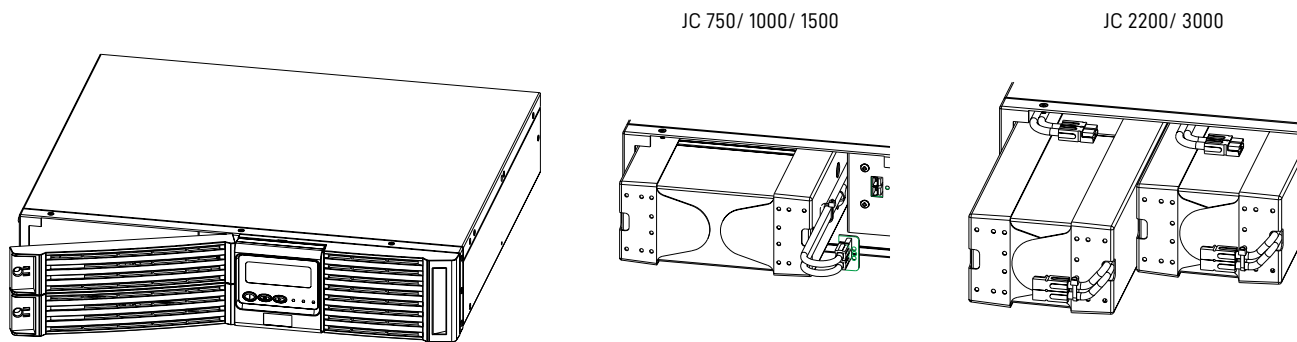
OPTIONS

- Input cable
- RJ45 protection
- Dry contact relay/SNMP/WEB card
- XL version with increased internal back-up time
- USB cable

WHAT'S IN THE BOX

- IEC output cable

HOT SWAP BATTERY

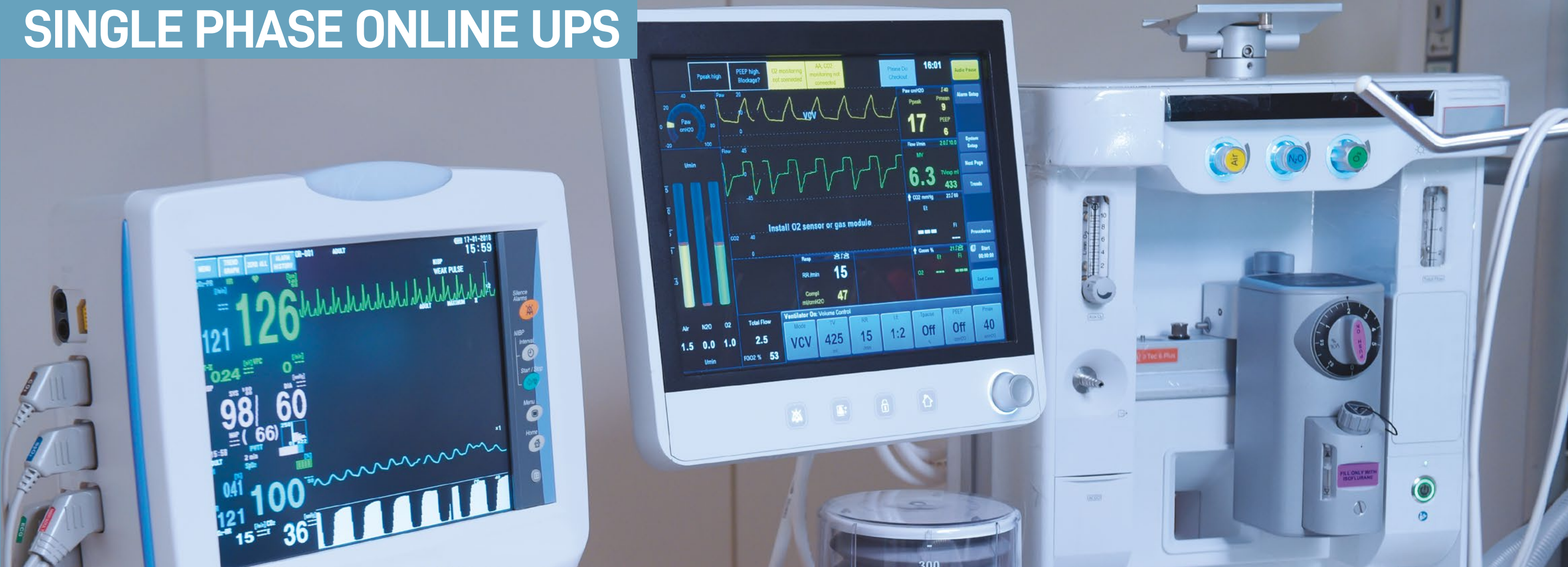








SPECIFICATIONS

MODEL			JC750	JC1000	JC1500	JC2200	JC3000
INPUT	Voltage Range		165-300 configurable				
	Frequency Range		45~65Hz (Auto sensing)				
	Phase		Single phase				
OUTPUT	Capacity		750VA/675W	1000VA/900W	1500Va/1350W	2200VA/1980W	3000VA/2700W
	Output Voltage (Backup mode)		220/230/240Vac ±5%	220/230/240Vac ±5%			
	Frequency Range (Backup mode)		50/60Hz ±0.5Hz				
	Transfer Time (AC to DC)		4-6ms typical				
	Output Waveform		Pure Sinewave				
DC START	DC START		Yes				
PHYSICAL	Dimension (WxHxD, mm)		440x88x405			440x88x650	
	Weight (Kg)	230V	15	19.4	20.9	33.8	37.2
	Outlets	230V	8x IEC 10A			8x IEC 10A + 1x IEC 16A	
BATTERY	Number of batteries		2	3	3	6	6
	Type		Sealed lead acid maintenance-free				
	Capacity		12V/7AH	12V/7AH	12V/9AH	12V/7AH	12V/9AH
	Rated Battery Voltage		24Vdc	36Vdc	36Vdc	72Vdc	72Vdc
	Recharge Time (to 90%)		5 hours				
DISPLAY	LCD Panel		Line bypass, AVR boost (buck), battery mode, battery level, battery low, load level, battery fault, UPS fault, site wiring fault, overload				
	Self-Diagnostics		Upon power on and software control				
ALARM	Audible or 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	Output breaker/ >100% alarms only, >120% for 10sec and then shutdown, >130% shutdown after 1 cycle				
	Short Circuit	AC Mode	Output breaker/ Electronic circuit				
		Inv. Mode	Inverter shutdown immediately				
ENVIRONMENT	Operation Temperature		0~40°C				
	Humidity		0%~90% (without condensing)				
INTERFACE	Interface		Standard: RS2323/ USB/ EPO Option: Dry contact card /SNMP/WEB card				
	Compatible platforms		Microsoft Windows series, Linux, Mac, etc.				
STANDARDS & CERTIFICATIONS	Safety & EMC		IEC EN 62040-1, IEC EN 62040-2				
	Performance		IEC EN 62040-3				
	Markings		CE				
BACK PANELS	<div>JC 750/ 1000/ 1500</div> <div>JC 2200/ 3000</div>						

Specifications subject to change without notice

SINGLE PHASE ONLINE UPS



<div><h3>ARES PLUS tower</h3><p>Improved battery life</p><p>1000VA ~ 3000VA</p></div>	<div><h3>MARS III tower</h3><p>More power, efficiency and redundancy</p><p>6000VA ~ 10000VA</p></div>	<div><h3>MARS II tower/ MT</h3><p>Standard cost effective protection for IT loads</p><p>10000VA ~ 20000VA</p></div>	<div><h3>ARES RT/ ODIN Plus</h3><p>Maximum protection for IT equipment</p><p>1000VA ~ 3000VA</p></div>	<div><h3>MARS III RT</h3><p>Highest active power for a rack mount UPS</p><p>6000VA ~ 10000VA</p></div>	<div><h3>MARS II RT</h3><p>Powerful, robust, reliable</p><p>10000VA ~ 20000VA</p></div>
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ARES PLUS tower

IMPROVED BATTERY LIFE

1000VA ~ 3000VA

ARES PLUS tower has a number of smart features that increase battery life. Thanks to the new Battery Discharge protection control function, it's perfect for medium voltage substations applications.



PERFECT FOR:

Servers

Telecom

Audio-Video

Medium voltage substation

Healthcare

FEATURES

- Online double conversion VFI protection from 1000VA to 3000VA
 - Extreme battery lifetime thanks to:
 - wide input voltage tolerance (110-300V)
 - wide input frequency tolerance (44-66Hz)
 - intelligent battery management
 - Battery discharge level control, settable 30-100% of the available capacity
 - Precise patented backup time estimation
 - 2 programmable IEC outlets plus two Schuko
- Cold start to activate loads without mains
 - Multiple operation modes to maximize energy efficiency
 - Strong overload capability to improve CB's selectivity
 - Manually activated extra service check
 - Firmware upgradable for updates and customization
 - Remote EPO and On/Off functions
 - RS232 and USB port, intelligent slot

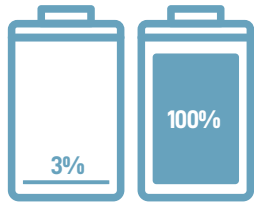
OPTIONS

- USB card, RS485 card, dry contact relay card, SNMP/web card
- Extra RS232 card
- External battery cabinet
- Different outlets
- LED interface
- Ares Plus 3000 version with 8 batteries

WHAT'S IN THE BOX

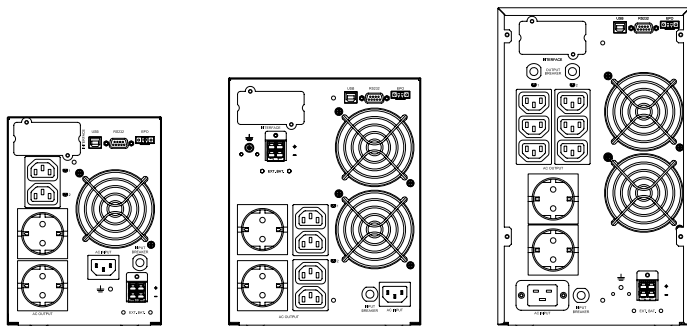
- Input power cable
- Output power cable

BATTERY DISCHARGE LEVEL CONTROL



- 1) Set your battery discharge percent level (3-100%)
- 2) When UPS is in battery mode, it stops when configured battery level is reached
- 3) UPS will be capable to turn on and discharge battery completely upon subsequent cold start

SPECIFICATIONS

MODEL		AR1000 PLUS	AR2000 PLUS	AR3000 PLUS		
INPUT	Phase	Single phase				
	Voltage Range*	110~300Vac				
	Frequency Range	44~66Hz (Auto sensing)				
	Input Power Factor	>0.99 @ 100% linear load				
OUTPUT	Capacity	1000VA/900W	2000VA/1800W	3000VA/2700W		
	Output Voltage	200/208/220/230/240 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 SineWave				
EFFICIENCY	Line Mode	Up to 92%				
	High Efficiency Mode	Up to 96,5%				
PHYSICAL	Dimensions (WxHxD, mm)	154x211x382.4	192x250x470	192x319.9x486	192x319.9x552.8	
	Net Weight (kg)	11.6	22.2	29.8	42.4	
BATTERY	Capacity		12Vdc/7AH		12Vdc/9AH	
	Battery Number		3	6	6	12
	Battery Voltage		36	72	72	72
	Recharge Time (to 90%)		4 hours			
	Battery Bank	Code	BT060367-0000		BT120727-0000	
		Number of batteries	6		12	
		Battery type	Lead acid maintenance free 12V 7Ah/9Ah			
Dimensions (WxHxD, mm)		154 x 258.2 x 403.6		192 x 319.9 x 552.8		
DISPLAY	LCD measures	Voltage/Frequency/Load level/Battery voltage/ Output current/Estimated back-up time/ Temperature				
	Self-Diagnostics	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				
PROTECTION	Full protection	Overload, over temperature, short circuit, deep discharge, overcharge				
FUNCTION	Multi-Mode	Normal/ECO/CVCF				
	DC Start	Yes				
ENVIRONMENT	Operation Temperature	0~40℃				
	Operation Humidity	0%~90% (without condensing)				
	Altitude	1000m without derating				
	Noise Level	≤ 50dBA @ 1 meter front				
INTERFACE	Standard	RS-232, EPO, USB, Comm. Slot				
	Option	Dry contact card, SNMP/Web card, RS485				
	Compatible platforms	Microsoft Windows series, Linux, Mac				
STANDARDS & CERTIFICATIONS	Safety & EMC	IEC EN 62040-1, IEC EN 62040-2				
	Performance	IEC EN 62040-3				
	Marks	CE				
BACK PANELS	<div>AR 1000/2000/3000 Plus</div> <div></div>					

Specifications subject to change without notice

* Based on load percentage

MARS III tower

MORE POWER, EFFICIENCY
AND REDUNDANCY

6000VA ~ 10000VA

MARS III tower features Power Factor 1 on all ratings, provides high redundancy thanks to 4 units in paralel configuration.



PERFECT FOR:



Critical IT equipment



Telecom



Healthcare



VOIP



Industry

FEATURES

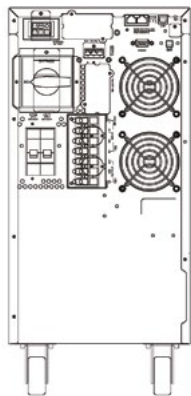
- kW = kVA - More available power.
- 4 units parallel, 3+1 redundancy possibility with parallel kit
- Generator compatibility to guarantee efficient functioning
- Dual input
- Flexible battery configuration to best adapt to your needs 16/18/20 batteries
- Precise back-up time estimation
- Multiple operation modes to maximize energy efficiency
- Flash upgradable firmware for updates and customisation
- Hot swap batteries - batteries can be replaced while UPS working
- Remote EPO and On/Off functions
- USB, intellinegt slot
- Manually activated extra service check

OPTIONS

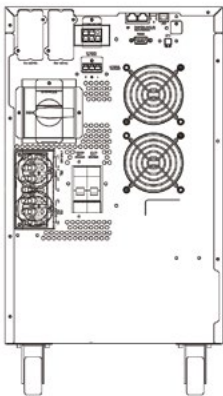
- Versions with transformer in the same footprint
- Extra battery charger
- External battery cabinets with the same aesthetics
- Parallel kit
- 6kVA with 12 or 14 batteries
- Version EN 50171 third-party certified
- RS232, RS485, dry contact relay card, SNMP/web card
- External bypass switch and external socket

BACK PANEL

MSIII 6000



MSIII 10000



SPECIFICATIONS

MODEL		MSIII 6000	MSIII 10000
INPUT	Phase	Single Phase	
	Voltage Range*	110~280Vac	
	Frequency Range	45~70Hz	
	Input Current Distortion	3%	
	Input Power Factor	Up to 0.99 @ Linear load	
OUTPUT	Capacity	6000VA/6000W	10000VA/10000W
	Voltage	without transformer	200/208/220/230/240 Vac, settable
		with transformer	120/208 or 110/220 or 115/230 or 120/240 Vac
	Output Power Factor **	1	
	Output Voltage Distortion	≤2% @ 100% Linear load	≤7% @ 100% Non-Linear load
	Output Voltage Regulation	without transformer	±1%
		with transformer	±3%
	Frequency Range	±1Hz or ±3Hz (selectable)	
	Crest Factor	3:1	
EFFICIENCY	Online Mode	Up to 94%	
	ECO Mode	98%	
PHYSICAL	with batteries	Dimensions (WxHxD, mm)	240x513x700
		Net Weight (kg)	78
	with transformer & batteries	Dimensions (WxHxD, mm)	240x661x700
		Net Weight (kg)	121
BATTERY	Number	16/18/20 (12/14 optional)	16/18/20
	Type	VRLA, Sealed maintenance free lead acid	
	Recharge Time (to 90%)	4hours	
	Charger	2-step (CC-CV), 1.7A (max.)	
	Battery Cabinet	Code	BT6024037
		Max battery n°/string	20
		Max battery quantities	60
		Dimensions (WxHxD, mm)	288x661x663
DISPLAY	Status on LED + LCD	Line mode, backup mode, ECO mode, bypass supply, battery low, battery bad/disconnect, overload, UPS fault	
	Readings on LCD	Input voltage, input frequency, output voltage, output current, output frequency, load percentage, battery voltage, inner temperature, backup time estimation	
	Self-Diagnostics	Upon power-on, manual control by panel & communication, self routine check	
ALARM	Audible or Visual	Line failure/Battery low/Transfer to bypass/System fault	
PROTECTION	Full protection	Overload, over temperature, short circuit, overcharge	
FUNCTION	Multi-mode	Normal/ ECO/ Frequency converter	
	DC start	Yes	
	Parallel capacity	Up to 4 units (optional)	
	Parallel redundancy	3+1 (optional)	
ENVIRONMENT	Operation Temperature	0~40°C	
	Operation Humidity	0%~90% (without condensing)	
	Altitude	1000m without derating	
	Noise Level	≤60dBA @ 1 meter	
INTERFACE	Standard	USB, EPO/ROO, RS232, Comm. Slot	
	Option	RS485, Dry contact card, SNMP/Web card, RS232 card	
	Compatible platforms	Microsoft Windows series, Linux, Mac	
STANDARDS & CERTIFICATIONS	Safety & EMC	IEC EN 62040-1, IEC EN 62040-2	
	Performance	IEC EN 62040-3	
	Marks	CE/TUV	

Specifications subject to change without notice

* Depending on load percentage: 176~280VAC, without derating; 160~176VAC, derating to 75% load, 110~160VAC, derating to 50% load

** Depending on battery number

MARS II

3/1 tower

STANDARD COST EFFECTIVE
PROTECTION FOR IT LOADS

10000VA ~ 20000VA

With its field proven technology, Mars II is the cost effective solution for the majority of IT applications.



PERFECT FOR:


IT loads & servers


Commercial


Networking


Industry

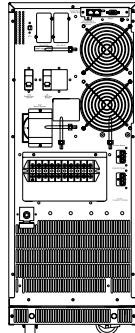
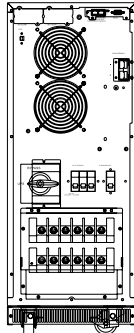
FEATURES

- Online protection with 0.9 power factor
- LCD display, the same User Interface as of all the RT range for greater ease of use
- Multiple operation modes to maximize energy efficiency
- Parallelable up to 4 units, for enhanced redundancy with parallel kit*
- RS232 and USB connection
- Coordinated external battery cabinets
- Cold start, to turn on the load in battery mode
- Generator compatibility thanks to low input distortion*
- Manually activated extra service check
- Simplified installation.
- UPS with internal batteries can connect easelly to external battery cabinets
- Remote EPO function

OPTIONS

- Isolation transformer
- External manual bypass
- RS232, RS485, dry contact relay card, SNMP/web card

SPECIFICATIONS

MODEL		MSII 10000 3/1		MSII 15000 3/1		MSII 20000 3/1		
INPUT	Voltage*		277~485Vac (3phase)					
	Frequency		45~65Hz					
	Phase		Three Phase + Neutral					
	Power Factor		Up to 0.99					
OUTPUT	Voltage		200/208/220/230/240 Vac Selectable (208/120Vac optional)					
	Capacity		9000W		13500W		18000W	
	Frequency (Battery Mode)		±1Hz or ±3Hz (selectable)					
	Current crest ratio		3:1					
	Harmonic distortion		<3% at Linear Load					
	Output waveform		Pure SineWave					
	DC start		Yes					
EFFICIENCY	Online Mode		Up to 91%					
	ECO Mode		Up to 98%					
PHYSICAL	Dimensions (WxHxD, mm)		290x748x645					
	Net Weight (kg)		101		60			
BATTERY	Number		20pcs (internal)		No internal battery			
	Type		Sealed maintenance free lead acid					
	Capacity		12V/9Ah					
	Rated Battery Voltage		240Vdc					
	Recharge Time (to 90%)		4~6 hours					
	Battery Bank	Code	T60N00-0000		T60V00-0000			
		Max. Quantities	60					
		Dimension (WxHxD, mm)	290x748x631					
DISPLAY	Status on LED + LCD		Line mode, backup mode, ECO mode, bypass supply, battery low, battery fault, overload, UPS fault					
	Readings on LCD		Input voltage, input frequency, output voltage, output frequency, load percentage, load current, battery voltage, inner temperature					
	Self-Diagnostics		Upon power-on, front panel setting & software control, 24-hour routine checking					
ALARM	Audible or Visual		Line failure/Battery low/Transfer to bypass/System fault					
PROTECTION	Full protection		Overload, over temperature, short circuit, overcharge					
ENVIRONMENT	Operation Temperature		0~40℃					
	Operation Humidity		0%~90% (without condensing)					
	Altitude		1000m without derating					
	Noise Level		<50dBA @ 1 meter			<60dBA @ 1 meter		
INTERFACE	Standard		RS232, USB, EPO, comm. slot					
	Options		2nd RS232, RS485, contact card, SNMP/Web card					
	Compatible platforms		Microsoft Windows series, Linux, Mac					
STANDARDS & CERTIFICATIONS	Safety & EMC		IEC EN 62040-1-1, IEC EN 62040-2					
	Performance		IEC EN 62040-3					
	Marks		CE					
BACK PANELS	<div><div><div>MSII 10k 3/1</div></div><div><div>MSII 15k-20k 3/1</div></div></div>							

Specifications subject to change without notice

* Based on load percentage

ARES RT Plus

ODIN Plus


THE BEST ONLINE PROTECTION
FOR ALL TYPES OF IT CABINETS

1000VA ~ 3000VA

Thanks to its reduced depth, Odin Plus is perfect for short IT cabinets.
While Ares RT Plus fits best where the available height is limited.

PERFECT FOR:

 Small offices

 Commercial

 Networking

 Healthcare

 Industry

 CCTV alarm

FEATURES

- Online double conversion
- Wide input voltage range to improve battery life
- Convertible rack/tower with rotating LCD
- Power Factor 0.9 adapted to the majority of the loads
- Battery autonomy on display based on battery capacity and quantity
- Small size - Can fit 500mm deep cabinets
- Simplified service: same spares of tower model
- Programmable outlets
- EPO, USB, Comm. Slot and RS232 port
- Battery deep discharge protection

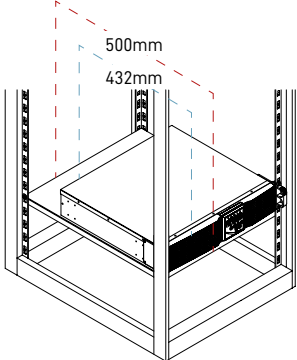
OPTIONS

- Version with internal extra charger
 - ODIN3000 Plus version with 8 batteries
 - External bypass switch with sockets
- USB card, dry contact relay card, SNMP card, rail kit
 - External socket box

WHAT'S IN THE BOX

- AR1000RT Plus/ODIN1000 Plus: 1 x input power cable + 1 x output power cable
- AR2000-3000RT Plus/ODIN2000-3000 Plus: 1 x input power cable + 2 x output power cable

ODIN COMPACT SIZE



With a depth of only **432mm**, Odin Plus fits cabinets as short as **500mm**

SPECIFICATIONS

MODEL		AR1000RT Plus		AR2000RT Plus		AR3000RT Plus		ODIN1000 Plus		ODIN2000 Plus		ODIN3000 Plus	
INPUT	Voltage*		110~300Vac										
	Frequency		45~66Hz (Auto sensing)										
	Phase		Single Phase										
	Power Factor		>0.99 @ 100% linear load										
OUTPUT	Capacity*		1000VA/900W	2000VA/1800W	3000VA/2700W	1000VA/900W	2000VA/1800W	3000VA/2700W					
	Voltage		200/208/220/230/240 Vac										
	Power factor		0.9										
	THDv		<3% @ 100% Linear load					<7% @ 100% non-linear load					
	Voltage regulation		1%										
	Frequency range		±1Hz or ±3Hz (selectable)										
	Crest factor		3:1										
	Output waveform		Pure sinewave										
	Output outlets		3x IEC C13	6x IEC C13	6x IEC C13 + 1x IEC C19	3x IEC C13	6x IEC C13	6x IEC C13 + 1x IEC C19					
EFFICIENCY	Online Mode		Up to 91%										
	ECO Mode		Up to 97%										
PHYSICAL	Dimensions (WxHxD, mm)		440x88x405	440x88x600	440x88x600	440x88x405	440x132x432	440x176x432					
	Net Weight (kg)		11.7	21.8	24,6	11.7	23	25					
BATTERY	Number		3	6	6	3	6	6					
	Voltage		36	72	72	36	72	72					
	Type		Sealed maintenance free lead acid 12Vdc										
	Recharge Time (to 90%)		4 hours										
	Empty Battery Bank	Code	BC060000-0000	BC120000-0000			BC060000-0000		BC120722-0000				
		Max. Quantities	6	12	12	6	12	12					
DISPLAY	LCD measures		Voltage/Frequency/Load level/Battery level/Output current/Estimated										
	Self-Diagnostics		Upon power-on, front panel setting & software control, 24-hour routine checking										
	ALARM		Audible or Visual										
PROTECTION		Full Protection		Overload, over temperature, short circuit, discharge, overcharge									
ENVIRONMENT	Operation Temperature		0~40°C										
	Operation Humidity		0%~90% (without condensing)										
	Altitude		1000m without derating										
	Noise Level		≤50dBA @ 1 meter front										
INTERFACE	Type		RS232, EPO, USB and Comm. Slot										
	Communication slots		Dry contact card, SNMP/Web card, RS485 card										
	Compatible platforms		Microsoft Windows series, Linux, Mac										
STANDARDS & CERTIFICATIONS	Safety & EMC		IEC EN 62040-1, IEC EN 62040-2										
	Performance		IEC EN 62040-3										
	Marks		CE										
BACK PANELS	AR1000RT Plus		AR2000RT Plus				AR3000RT Plus						
	ODIN1000 Plus		ODIN2000 Plus				ODIN3000 Plus						

Specifications subject to change without notice

* Based on load percentage

MARS III RT

HIGHEST ACTIVE POWER
FOR A RACK MOUNT UPS



6000VA ~ 10000VA

With its Power Factor 1, Mars III delivers the highest active power for the same kVA. The compact version with batteries included is the simplest choice for servers protection.



PERFECT FOR:



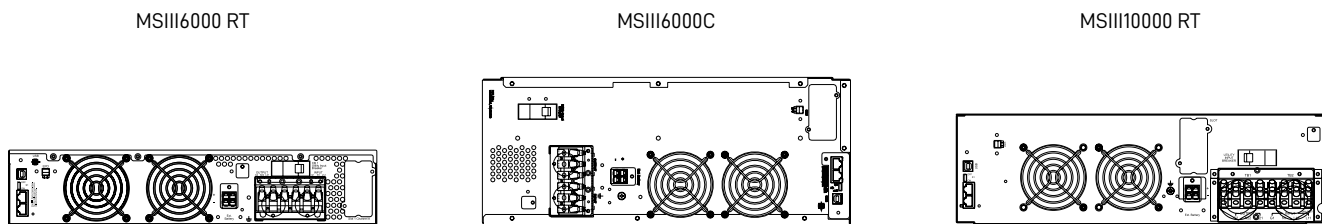
FEATURES

- kW = kVA – More available power
- Convertible rack/tower with rotating display
- Compact version with batteries included
- High efficiency also in online mode
- 4 units parallel, 3+1 redundancy possibility with parallel kit
- Generator compatibility to guarantee efficient functioning
- Extremely wide input voltage range, to reduce battery cycling and increase battery lifetime
- Flexible battery configuration to best adapt to your needs 16/18/20 batteries
- Precise patented back-up time estimation
- Multiple operation modes to maximize energy efficiency
- Flash upgradable firmware for updates and customization
- Manual extra service check
- USB, RS232, comm slot, EPO/ROO

OPTIONS

- External battery cabinets with the same aesthetics
- Versions with transformer in the same case of the battery bank
- External battery charger
- Parallel box
- Rail kit
- SNMP card, dry contact ard, RS485 card
- Version of 6000C with socket
- Dual input on 10kVA model
- External bypass switch
- External socket box
- 6kVA version for 12/14/16 batteries

BACK PANEL



SPECIFICATIONS

MODEL		MSIII6000 RT		MSIII6000C		MSIII10000 RT	
INPUT	Phase		Single Phase				
	Voltage Range**		110-280VAC				
	Frequency Range		45~70Hz				
	Current Distortion		<3%				
	Power Factor		Up to 0.99 @ 100% linear mode				
OUTPUT	Voltage (without transformer)		200/208/220/230/240 Vac, settable				
	Capacity		6000VA/6000W	6000VA/6000W		10000VA/10000W	
	Power Factor**		1				
	Voltage Distortion		≤2% @100% load				
			≤7% @100% non-linear load				
	Output Voltage Regulation	without transformer	±1%				
		with transformer	±3%				
	Frequency Range		±1Hz or ±3Hz (Selectable)				
	Crest Factor		3:1				
Output Waveform		Pure Sinewave					
EFFICIENCY	Online Mode		Up to 94%				
	ECO Mode		Up to 98%				
PHYSICAL	Dimensions (WxHxD, mm)		440x88x685	440x176x685		440x132x685	
	Net Weight (kg)		18.5	60		21.5	
BATTERY	Number		16/18/20 (12/14 optional)				16/18/20
	Type		VRLA, Sealed maintenance free lead acid				
	Recharge Time (to 90%)		4 hours				
	Charger (16/18/20 model)		2-step (CC-CV), 1.7A (max.)				
	Internal batteries		--	20x 5Ah		--	
	Battery Bank	Code	C20X3U00	--		C20X3U00	
		Max quantities	20				
Dimension (WxHxD, mm)		440x132x685	440x88x685		440x132x685		
DISPLAY	Status on LED + LCD		Line mode, backup mode, ECO mode, bypass supply, battery low, battery bad/disconnect, overload UPS fault				
	Readings on LCD		Input voltage, input frequency, output voltage, output current, output frequency, load percentage, battery voltage, inner temperature, backup time estimation				
	Self-Diagnostics		Upon power-on, manual control by panel & communication, self routine check				
ALARM	Audible or Visual		Line failure/Battery low/Transfer to bypass/System fault				
PROTECTION	Full Protection		Overload, Over temperature, short circuit, overcharge				
FUNCTION	Multi-Mode		Normal/ECO/Frequency converter				
	DC start		Yes				
	Parallel capacity		Up to 4 units				
	Parallel redundancy		3+1				
ENVIRONMENT	Operation Temperature		0~40°C				
	Operation Humidity		0%~90% (without condensing)				
	Altitude		1000m without derating				
	Noise Level		≤60dBA @ 1 meter				
INTERFACE	Standard		USB, EPO/ROO				
	Option		RS232, RS485, Dry contact card, SNMP/WEB card, 2nd RS232 card				
	Compatible platforms		Microsoft Windows series, Linux, Mac				
STANDARDS & CERTIFICATIONS	Safety & EMC		IEC EN 62040-1, IEC EN 62040-2				
	Performance		IEC EN 62040-3				
	Marks		CE				

Specifications subject to change without notice

* Depending on load percentage

** Depending on number of battery

MARS II RT 3/1

POWERFUL, ROBUST, RELIABLE

10000VA ~ 20000VA

On the market since many years, Mars II RT combines reliability and robustness to high power and great installation flexibility.



PERFECT FOR:


Servers racks


Big IT loads


Small server rooms

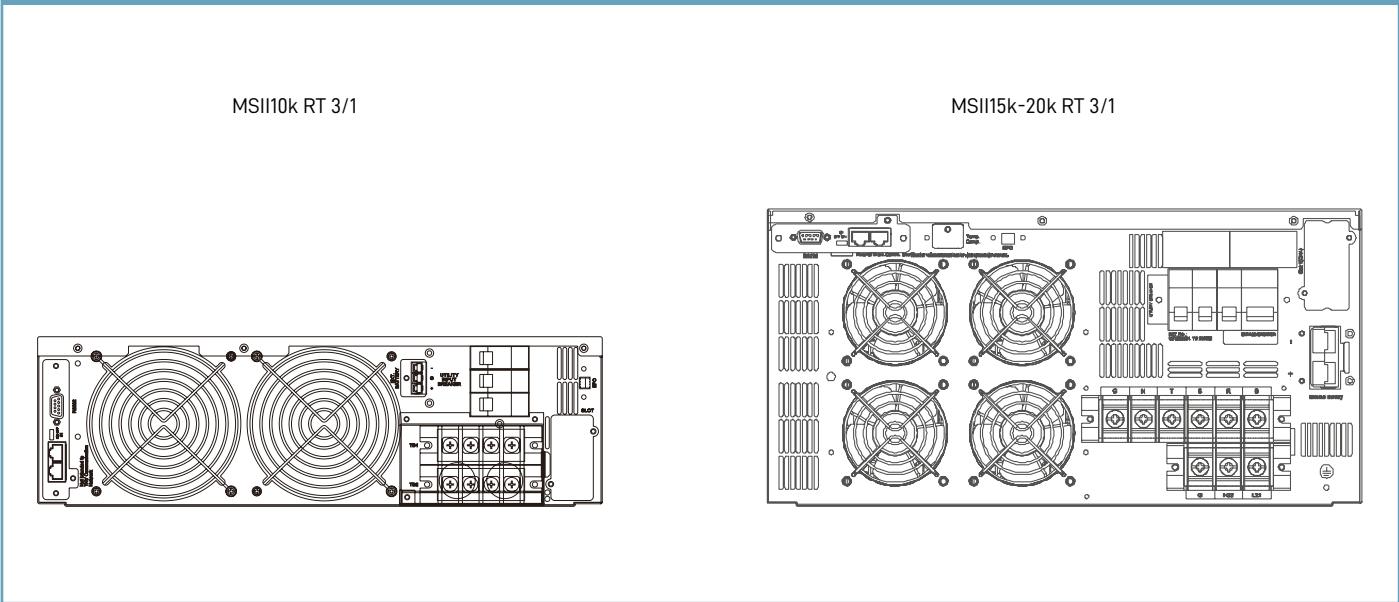
FEATURES

- On-line protection with 0,9 power factor
- LCD display
- Dual input (only for Mars II 20k version)
- Full rated bypass line with single phase output
- Multiple operation modes to maximize energy efficiency
- Parallelable up to 4 units, for enhanced redundancy
- RS232 connection and comm. slot
- Emergency Power Off (EPO)
- Coordinated external battery cabinets
- Cold start, to turn on the load in battery mode
- Manually activated extra service check

OPTIONS

- Parallel kit
- External manual bypass
- USB, RS485, SNMP, dry contacts boards

BACK PANEL



SPECIFICATIONS

MODEL		MSII10k RT 3/1	MSII15k RT 3/1	MSII20k RT 3/1
INPUT	Voltage*	190-485VAC		
	Frequency*	45-65Hz	45~70Hz	
	Phase	Three Phase + Neutral		
	Power Factor	Up to 0.99 @ Linear load		
OUTPUT	Voltage*	200/208/220/230/240 Vac, selectable		
	Capacity	10000VA/9000W	15000VA/13500W	20000VA/18000W
	Frequency (Battery Mode)	±1Hz or ±3Hz (Selectable)		
	Current Crest Ratio	3:1		
	Harmonic Distortion	<3% at Linear load		
	Output Waveform	Pure Sinewave		
	Efficiency	Up to 93%		
	Efficiency ECO Mode	Up to 95%		
	DC Start	Yes		
PHYSICAL	Dimensions (WxHxD, mm)	440x132x680	440x220x720	
	Net Weight (kg)	28	36	
EXTERNAL BATTERY CABINET	Number	20pcs		
	Type	Sealed maintenance free lead acid		
	Capacity	12V/9AH		
	Rated battery voltage	240Vdc		
	Recharge Time (to 90%)	6 hours		
	Code	C20X3U00 (plus extra cable)	C20V3U00	
	Dimension (WxHxD, mm)	440x132x685	440x132x680	
DISPLAY	Status on LED + LCD	Line mode, backup mode, ECO mode, bypass supply, battery low, battery bad/disconnect, overload UPS fault		
	Readings on LCD	Input voltage, input frequency, output voltage, output frequency, load percentage, battery voltage & inner temperature		
	Self-Diagnostics	Upon power-on, LCD setting & software control, 24-hour routine checking		
ALARM	Audible or Visual	Line failure/Battery low/Transfer to bypass/System fault		
PROTECTION	Full Protection	Overload, Over temperature, short circuit, overcharge		
FUNCTIONS	Multi-Mode	Normal/ECO/Frequency converter		
	DC start	Yes		
	Parallel capacity	Up to 4 units		
	Parallel redundancy	3+1		
ENVIRONMENT	Operation Temperature	0~40°C		
	Operation Humidity	95% (without condensing)		
	Altitude	1000m without derating		
	Noise Level	<50dBA @ 1 meter	<60dBA @ 1 meter	
INTERFACE	Standard	RS232, USB, EPO, comm. slot		
	Communication slots	RS232, USB, RS485, Dry contact card, SNMP/Web card		
	Compatible platforms	Microsoft Windows series, Linux, Mac		
STANDARDS & CERTIFICATIONS	Safety & EMC	IEC EN 62040-1, IEC EN 62040-2		
	Performance	IEC EN 62040-3		
	Marks	CE		

Specifications subject to change without notice

* Based on model and/or load percentage

THREE PHASE UPS



KRONOS

Technology, performance and value
for money in the smallest footprint

10kVA ~ 40kVA



TAURUS

Cutting edge technology for
high performance three phase UPS

10kVA ~ 80kVA



TITAN

Top efficiency power protection
for datacenters

100kVA ~ 500kVA



TITAN GT

Robust and reliable
transformer based UPS

100kVA ~ 800kVA



KRONOS

TECHNOLOGY, PERFORMANCE AND VALUE FOR MONEY WITH THE SMALLEST FOOTPRINT

10kVA ~ 40kVA

Thanks to its reduced footprint, Kronos is the optimum choice when the available space is limited. Moreover, the included features meet the needs of the majority of IT installations with a very positive value-for-money.



PERFECT FOR:



Small datacenter



Telecom



Healthcare



Industry

FEATURES

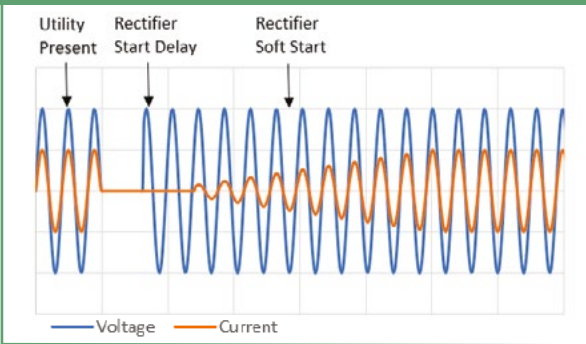
- The smallest footprint of its category: 0,22m² for 20kVA with 40x9Ah internal batteries
- Up to 95% efficiency in online mode
- Built-in high current battery charger (10kVA with up to 7A standard charger)
- 4 poles manual bypass and Breakers
- Easy maintenance thanks to the vertical boards
- Generator compatibility with ramp up configurable in power and time delay
- Wrong phase sequence rotation protection
- THDi <3% for a minimized grid impact
- High overload capability up to 1 minute @150%
- Cold start function included
- Logfile, UPS information and settings easily downloadable on removable SD card from LCD, to simplify service operations
- Up to 40 x 9Ah internal battery
- Wide range of battery number per string from 26 to 40 LCD settable
- Parallelable up to 6 units, in power or redundancy, LCD settable
- Standard separate or common batteries for parallel systems
- Touch screen colour LCD display for quick and user-friendly operation (14 selectable languages)
- Wide communication offer as a standard: two intelligent slots, RS232, USB, programmable dry contacts

OPTIONS

- SNMP, RS485, Modbus boards
- External temperature sensor
- Parallel kit
- Remote Touch Panel suitable to monitor up to 64 units with 3 prog. build-in Output Dry Contacts



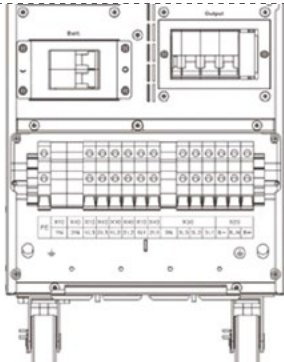
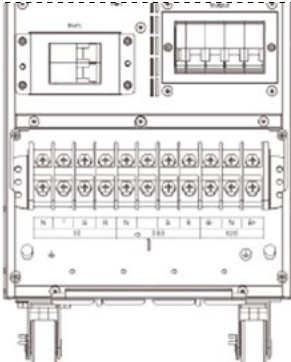
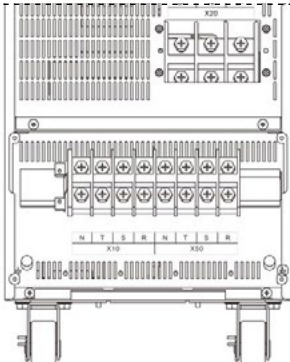
GENERATOR COMPATIBILITY



SETTINGS EASILY DOWNLOADABLE ON SD CARD



SPECIFICATIONS

MODEL		KR10 KVA 3/3_3/1	KR15 KVA 3/3_3/1	KR20 KVA 3/3_3/1	10 KVA 3/3	15 KVA 3/3	20 KVA 3/3	30 KVA 3/3	40 KVA 3/3
INPUT	Voltage	400V 3 Phase + N							
	Voltage Tolerance	±20% @100% load, -40% ~-20% @50% load							
	Frequency	40 ~ 70Hz							
	Power Factor	≥ 0.99							
	THDi	3/1	≤ 5% @100% load			≤ 3% @100% load			
3/3	≤ 3% @100% load								
OUTPUT	Voltage	3/1	220/230/240V 1Phase + N		380/400/415V 3 Phase + N				
	3/3	380/400/415V 3Phase + N							
	Voltage Tolerance	±1% (Static Load)							
	Frequency	50/60Hz							
	Frequency Tolerance	±0.01% (free running)							
	Power Factor	0.9							
	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 1minutes							
BATTERY	Number of batteries	26-40pcs configurable (Please check with your technical reference)							
	Charging Current MAX	10A	15A	21A	10A	15A	21A	30A	39A
	Common Battery for Parallel Configuration	Yes							
	Internal Battery	Available for housing 9AH 40pcs							N.A.
EFFICIENCY	VFI Mode	Up to 95%							
	ECO Mode	> 98%							
	Backup	Up to 94%							
GENERAL	Parallel	Up to 6 units (optional)							
	Dimensions (WxHxD, mm)	260x890x850 (with wheel)							
	Weight (kg)	74Kg	76 kg	76 kg	74 kg	76 kg	76 kg	85 kg	88 kg
	Protection Grade	IP20							
	Display and MMI	4.3" Colorful LCD Touch Screen							
	Built-in Communication Port	RS232, USB, EPO, Dry Contact, 3IN + 10UT							
	Optional Communication	2 communication slots for SNMP card, RS-485 modbus card, Dry contact card							
ENVIRONMENT	Operation Temperature	0 ~ 40°C							
	Operation Humidity	0 ~ 95% (w/o condensation)							
	Standards	IEC EN 62040-1, IEC EN 62040-2, IEC EN62040-3							
	Mark	CE							
	Noise	<52dBA @ 1 meter						<55dBA @ 1 meter	
BACK PANEL	Power cables connections								
									
	10-15-20kVA dual input			10-15-20kVA single input			30-40kVA single input		

TAURUS

CUTTING EDGE TECHNOLOGY FOR HIGH PERFORMANCE 3PHASE UPS

10kVA ~ 80kVA

Delivering clean, stable and reliable power for critical three-phase loads, Taurus is the best choice for small datacenters. And with a simplified maintenance helps reducing the TCO of the installation.

PERFECT FOR:


Small datacenter


Healthcare


Industry


CNC machines


Lift

FEATURES

- Generative loads compatibility with patented function to efficiently use reinjected energy
- Generator compatibility with ramp up configurable in power and time delay with wide input frequency range
- Wrong Phase Sequence Rotation Proof, the UPS can always supply the load under inverter
- Touch screen colour LCD display for quick and user-friendly operation (14 selectable languages)
- UPS information, settings and log file easily downloadable on removable SD card from LCD
- Flexible High Power Charger, with two strings of internal batteries up to 40kVA
- Wide range of battery number per string from 32 to 40 LCD settable (26-40 for 10kVA)
- Ready for Li-ion or other battery technology
- Real Time Battery Detection - immediate alarm once battery disconnected
- Smart Battery Discharge - For Battery Discharge Test without extra loads and connections
- Dual input and internal manual bypass, 440mm wide fits into higher IP cabinets
- Cold start (standard up to 20kVA, optional up to 80kVA)
- Parallelable up to 6 units, in power or redundancy with Common or Separate battery LCD settable
- Wide communication offer as a standard: two intelligent slots, RS232, USB, programmable dry contacts
- Strong overload capacity (up to 300% for 3 seconds) to guarantee selectivity in the downstream installation

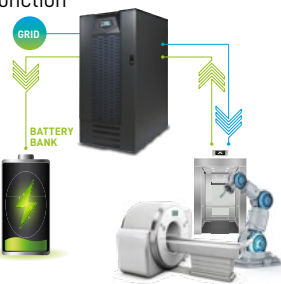
OPTIONS

- SNMP, RS485, Modbus board, Parallel kit
 - Internal battery trays for easily battery service
 - Internal isolation transformer (up to 40kVA)
 - External Temp. sensor and battery cabinets
- Remote Touch Panel suitable to monitor up to 64 units with 3 prog. build-in Output Dry Contacts

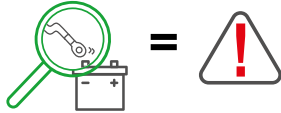


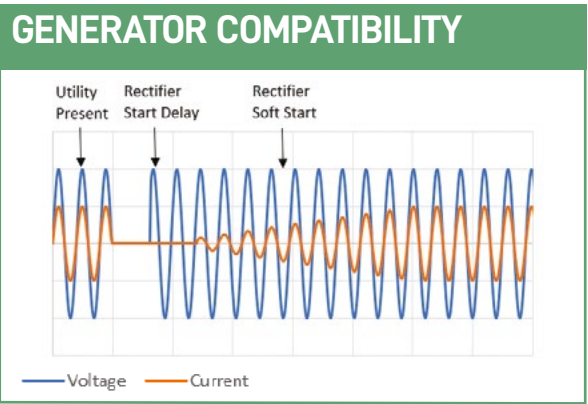
SMART FUNCTIONS

Patented Function

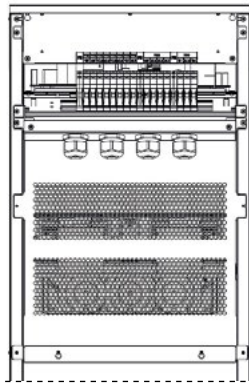
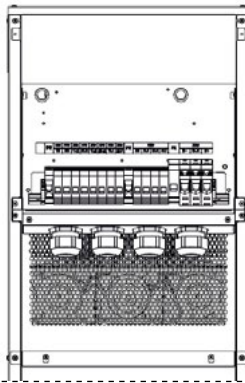
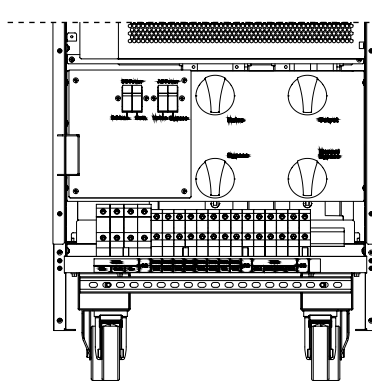


Smart Battery Detection





SPECIFICATIONS

MODEL		TS10	TS20	TS30	TS40	TS60	TS80
INPUT	Voltage	380/400/415V 3phase + N					
	Voltage Tolerance	±20% @ full load, -40% @ 50% load					
	Frequency	40~70Hz (independent from output frequency setting)					
	Power Factor	≥ 0.99					
	THDi	<3%					
OUTPUT	Voltage	380/400/415V 3phase + N					
	Voltage Tolerance	±1% (static load)					
	Power Factor	1					
	Frequency	50/60Hz					
	Frequency Tolerance	±0.01% (free running)					
	Crest Factor	3:1					
	Voltage Harmonic Distortion	<1% with linear load; <3% with distorting load					
Overload	110% for 60 minutes, 125% for 10 minutes, 150% for 1 minutes, >150% and <300 for 3 seconds						
BATTERY	Number per string	26~40pcs conf.	32~40pcs configurable				
	Charging current Max (A)	7A	14A	20A	26A	40A	52A
	Common battery for parallel configuration	Yes					
EFFICIENCY	VFI Mode	Up to 96%					
	ECO Mode	>98%					
BYPASS	Voltage	380/400/415V 3phase +N					
	Voltage Tolerance	±5%~±25% (alarm programmable)					
	Frequency	50/60Hz					
	Frequency Tolerance	±1Hz/±3Hz (selectable)					
GENERAL	Parallel	Up to 6 units					
	Dimensions (WxDxH) mm	440 x 840 x 1390				600 x 827 x 1300	
	Weight (kg)	84	86	130	132	200	210
	Protection Grade	IP20					
	Display and MMI	4.3" color LCD touch screen					
	Built-in Communication Port	USB, EP0, RS232, 2 Slots , 1 IN/3 OUT Programmable dry contacts					
	Optional Communication	SNMP card, RS-485 modbus card, extra Programmable dry contact card 6IN/6OUT					
ENVIRONMENT	Operation Temperature	0~40°C					
	Operation Humidity	0~95% (without condensation)					
	Tested to standards	IEC EN 62040-1, IEC EN 62040-2, IEC EN 62040-3					
	Mark	CE					
	Noise Level	<52dBA @ 1 meter		<55dBA @ 1 meter		<60dBA @ 1 meter	
POWER CONNECTIONS	Back Panel - Terminal TS10/ TS20		Back Panel - Terminal TS30/ TS40		Front Panel - Terminal TS60/ TS80		
							

Specifications subject to change without notice

TITAN

TOP EFFICIENCY POWER PROTECTION FOR DATACENTERS

100kVA ~ 500kVA

Titan offers highest protection and efficiency together with a Battery Care System that enhances strongly the battery life time.



PERFECT FOR:



Small/medium datacenter



Medical equipment



Critical loads



Industry

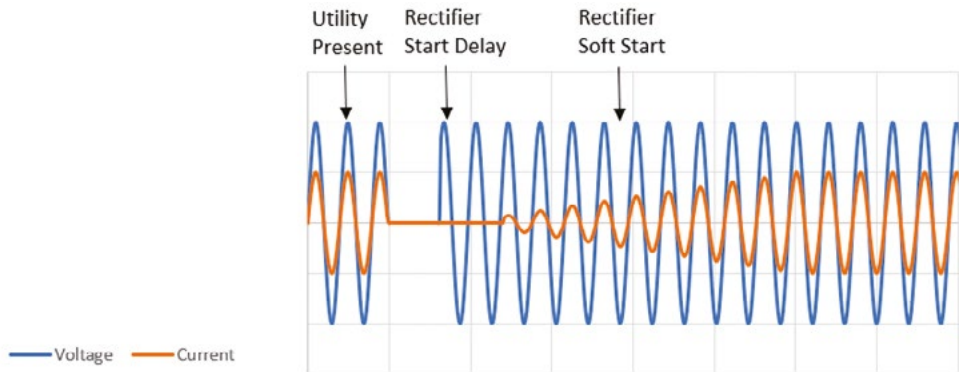
FEATURES

- Power Factor 1, up to 96% efficiency
- THDi <3% for a minimized grid impact
- Operates leading and lagging loads without derating
- Generator compatibility with ramp up configurable in power and time delay
- Battery Care system, to improve battery life
- Dual input and internal manual bypass
- Parallelable up to 6 units, in power or redundancy
- Separate or common batteries for parallel systems
- Wide communication possibilities: two intelligent slots, RS232 and USB
- Neutral disconnection for safe maintenance
- Front access for maximum service ease

OPTIONS

- Cold start
- SNMP, RS485, Modbus board, Thermal probe
- Programmable dry contacts
- Parallelable version
- Common battery for parallel systems
- Centralised bypass
- Version with internal transformer
- Touch screen display (100-160KVA) and LED status for quick and user friendly operation

GENERATOR COMPATIBILITY



SPECIFICATIONS

MODEL		TT100	TT125	TT160	TT200	TT250	TT300	TT400	TT500
INPUT	Voltage	400 Vac 3-phase with neutral							
	Voltage Tolerance	-20%, +15% (rectifier)							
	Frequency	45 to 65 Hz							
	Power Factor	> 0.99							
	THDi	< 3%							
OUTPUT	Voltage	380/400/415 Vac 3-phase with neutral							
	Voltage Tolerance	Static: ±1%; dynamic IEC/EN 62040-3 Class 1							
	Power Factor	1							
	Frequency	50/60 Hz							
	Frequency Tolerance	±0.001 (free running)							
	Crest Factor	3:1							
	Voltage Harmonic Distortion	<1% with linear load; <5% with distorting load							
	Overload	125% for 10 minutes, 150% for 30 seconds	125% for 5 minutes, 150% for 30 seconds						
BATTERY	Number	60~62 pcs configurable							
	Charging current Max	Up to 50A			Up to 120A				
	Common battery for parallel configuration	Yes							
EFFICIENCY	VFI Mode	Up to 96%							
	ECO Mode	≥ 98%							
BYPASS	Voltage	380/400/415 Vac 3-phase with neutral							
	Voltage Tolerance	±10% (selectable)							
	Frequency	50/60Hz (selectable)							
	Frequency Tolerance	±10Hz (selectable)							
GENERAL	Parallel	Up to 6 units							
	Dimensions (WxDxH) mm	560x940x1800			880x970x1978			1430x970x1978	
	Weight (kg)	320	360	380	720	850	930	1080	1250
	Protection Grade	IP20							
	Display and MMI	Color LCD touch screen							
	Built-in Communication Port	USB, serial RS232, EPO, battery circuit breaker/external maintenance bypass circuit breaker/diesel mode aux. cont.							
	Optional Communication	SNMP slots, RS-485 modbus card, extra dry contact card, remote system monitoring panel							
ENVIRONMENT	Operation Temperature	0~40°C							
	Operation Humidity	0~95% (without condensation)							
	Tested to standards	IEC EN 62040-1, IEC EN 62040-2, IEC EN 62040-3							
	Mark	CE							
	Noise Level	<60dBA @ 1 meter							

Specifications subject to change without notice


TITAN GT


ROBUST AND RELIABLE TRANSFORMER BASED UPS


100kVA ~ 800kVA

Long lasting UPS, robust thanks to the inverter transformer.

PERFECT FOR:


Datacenter


Medical equipment


Industry

FEATURES

- Power factor 0,9, transformer based UPS
- Up to 95% efficiency, 3 level IGBT inverter and rectifier
- THDi <3% for a minimized grid impact
- Front access for simplified maintenance.
- Battery Care system, to improve battery life
- High Power charger, with 3 steps charging,
- High overload capability
- Input for battery switch alarm contact
- Wide communication possibilities: two com slots, RS232, USB

OPTIONS

- Isolation or autotransformer for bypass or input line
- Temperature compensation of the battery charging voltage
- External maintenance bypass
- Parallel kit for load sharing
- Redundant parallel communication
- Load-sync for single UPS or two sets of parallel UPS
- Comm. slots, RS485 card, dry contact relay card, SNMP/web card



SPECIFICATIONS

MODEL		TT100/125/160-GT	TT200/250/300-GT	TT400-GT	TT500-GT	TT600-GT	TT800-GT
INPUT	Voltage	400 Vac 3-phase with neutral					
	Voltage Tolerance	-20%, +15% (rectifier)					
	Frequency	45 to 65 Hz					
	Power Factor	0.99					
	THDi	< 3%					
OUTPUT	Voltage	380/400/415 Vac 3-phase with neutral					
	Voltage Tolerance	Static: ±1%; dynamic IEC/EN 62040-3 Class 1					
	Power Factor	0.9					
	Frequency	50/60 Hz					
	Frequency Tolerance	±0.001 (free running)					
	Crest Factor	3:1					
	Voltage Harmonic Distortion	<1% with linear load; <5% with distorting load					
	Overload	125% for 10 minutes, 150% for 1 minute					
BATTERY	Number	50~52 pcs configurable					
	Charging current Max (A)*	Up to 100A					Up to 200A
EFFICIENCY	VFI Mode	Up to 95%					
	ECO Mode	> 98%					
BYPASS	Voltage	380/400/415 Vac 3-phase with neutral					
	Voltage Tolerance	±10% (selectable)					
	Frequency	50/60Hz (selectable)					
	Frequency Tolerance	±10Hz (selectable)					
	Parallel	Up to 6 units					
	Dimensions (WxDxH) mm	815x825 x1670	1200x860 x1900	1990x990 x1920	2430x990 x2020	2440x990 x2020	3640x990 x1920
	Weight (kg)	TT100-GT = 625 TT125-GT = 660 TT160-GT = 715	TT200-GT = 970 TT250-GT = 1090 TT300-GT = 1170	1820	2220	2400	3600
	Protection Grade	IP20					
	Display and MMI	Graphic display					
	Built-in Communication Port	USB, serial RS232, EPO, battery circuit breaker/external maintenance bypass circuit breaker/diesel mode aux. cont.					
	Optional Communication	SNMP slots, RS485 modbus card, extra dry contact card, remote system monitoring panel					
ENVIRONMENT	Operation Temperature	0~40°C					
	Operation Humidity	0~95% (without condensation)					
	Tested to standards	IEC EN 62040-1, IEC EN 62040-2, IEC EN 62040-3					
	Mark	CE					
	Noise Level	<62dBA @ 1 meter					

Specifications subject to change without notice

ACCESSORIES

SINGLE PHASE UPS			
GROUP	MODEL	DESCRIPTION	SUITABLE FOR MODELS
COMMUNICATION ACCESSORIES	DCE-C	Relay Contact Board (Programmable by software for output relay) + software	All
	Internal SNMP card	Net Agent 9 Internal (CY-504 series)	All
	External SNMP card	Net Agent 9 mini - External (DY-522 series)	All
	Internal SNMP card 3P	Net Agent 9 Internal 3 port (BY-506B series)	All
	External SNMP card USB	Net Agent 9 mini - External USB plug (DX-630 series)	All
	RS232 card	Internal RS232 card	AR RT Plus/ODIN Plus, AR Plus, MSIII-MSII T/RT
	RS485 card	Internal RS485 card	AR RT Plus/ODIN Plus, AR Plus, MSIII-MSII T/RT
	SNMP ATS	Internal SNMP card for ATS	ATS
PDUs AND SOCKETS	ESB-216	External socket box (2 x 16A IEC + 8 x 10A IEC) with circuit breakers - Dimensions 326x86x50mm - Weight 3.2Kg	MSIII-MSII T/RT
	ESB-217	External socket box (3 x 3 x 10A IEC) with circuit breakers - Dimensions 440x44x50mm - Weight 0.8Kg	AR RT Plus/ODIN Plus, AR Plus
	ESB-218	External socket box (4 x 16A IEC) without circuit breakers - Dimensions 440x44x50mm - Weight 0.8Kg	AR RT Plus/ODIN Plus, AR Plus, MSIII-MSII T/RT
	ESB-219	External socket box (3 x 3 x 10A IEC + 4 x 16A IEC) with circuit breakers - Dimensions 440x88x50mm - Weight 1.5Kg	MSIII-MSII T/RT
BYPASS BOXES	RACK-BP_PDU-16	External Manual Bypass + sockets (6x10A IEC - 2x16A IEC) Dimensions 440x88x77mm - Weight 2.7Kg	AR RT Plus/ODIN Plus, AR Plus
	RACK-BP_PDU-50	External Manual Bypass 50A max + sockets (4x16A IEC + 8x10A IEC) with circuit breakers - Dimensions 440x160x175mm - Weight 2.7Kg	MSIII-MSII T/RT
CHARGERS	CHG250W	External charger 250W 36-72Vdc selectable Dimensions 252x94x196mm - Weight 2.9Kg	AR RT Plus/ODIN Plus, AR Plus
	CHG1000A	External 1000W charger for tower/rack version for 6k and 10k - 4x parallelable - Dimensions 252x94x196mm - Weight 5Kg	MSIII-MSII T/RT
	CHG1000B	External 1000W charger for tower/rack version for 15k and 20k - 4x parallelable - Dimensions 252x94x196mm - Weight 5Kg	MSIII-MSII T/RT
MECHANICAL	Rail Kit	Rail kit for rack mount (convertible) UPS Dimensions 521-929x71x18mm (Adjustable) - Weight 2Kg	AR RT Plus/ODIN Plus, MSIII-MSII RT
PARALLEL KITS	Parallel Kit 6k	Parallel Kit for 2x6kVA, with RJ cables included Dimensions 440x132x129 mm	MSIII-MSII T/RT
	Parallel Kit 10k	Parallel Kit for 2x10kVA, with RJ cables included Dimensions 440x132x129mm	MSIII-MSII T/RT
	Parallel Cable 15/20K	Parallel cable for MSII	MSII T/RT
	MTBS-60	Parallel Distribution Box (60A) for up to 2-6KVA or 1-10KVA UPS for Tower/rack version	MSIII-MSII T/RT
	MTBS-120	Parallel Distribution Box (120A) for up to 4-6KVA or 2-10KVA UPS for Tower/rack version - Dimensions 48x43x23mm	MSIII-MSII T/RT
	MTBS-200	Parallel Distribution Box (200A) for up to 4-10KVA UPS for Tower/rack version - Dimensions 48x43x23mm	MSIII-MSII T/RT
TRANSFORMERS	GTM6K-WS	Isolation transformer & CAM Switch module for 6kVA (2U) Dimensions 440x88x 66mm - Weight 42Kg	MSIII-MSII T/RT
	GTM6K-WOS	Isolation transformer module for 6kVA (2U) Dimensions 440x88x66mm - Weight 41Kg	MSIII-MSII T/RT
	GTM10K-WS	Isolation transformer & CAM Switch module for 10kVA (3U) Dimensions 440x132x66mm - Weight 53Kg	MSIII-MSII T/RT
	GTM10K-WOS	Isolation transformer module for 10kVA(3U) Dimensions 440x132x66mm - Weight 52Kg	MSIII-MSII T/RT
OPTIONAL MINI CARDS	DY801	Mini-SNMP	All
	RS485	Mini RS485	All
	DCE-F	Mini dry contact	All

THREE PHASE UPS			
GROUP	MODEL	DESCRIPTION	SUITABLE FOR MODELS
COMMUNICATION ACCESSORIES	TS-KR-SNMP-1	SNMP Card	KR, TS
	TS-KR-EMD	Environmental Monitoring Device for SNMP Card Temperature & Humidity Monitoring, Two Alarm Input Contacts	KR, TS
	TS-KR-485	RS485 MODBUS Card	KR, TS
	TS-KR-DEC	Dry Contact Card, Program. Input Dry Contact x6 & Output Dry	KR, TS
MECHANICAL	TRAY32-40	Internal Battery Tray Kit for 10-40kVA (1 string x 40 blocks max)	TS
COLD START	CS30kVA	Cold Start Kit for 30kVA	TS
	CS40kVA	Cold Start Kit for 40kVA	TS
	CS60kVA	Cold Start Kit for 60kVA	TS
	CS80kVA	Cold Start Kit for 80kVA	TS
BACKFEED	BF10kVA	Backfeed Contactor Kit for 10kVA	TS
	BF20kVA	Backfeed Contactor Kit for 20kVA	TS
	BF30kVA	Backfeed Contactor Kit for 30kVA	TS
	BF40kVA	Backfeed Contactor Kit for 40kVA	TS
	BF60kVA	Backfeed Contactor Kit for 60kVA	TS
	BF80kVA	Backfeed Contactor Kit for 80kVA	TS
TRANSFORMERS	TRAFO10	10KVA Isolation Transformer (included installation kit) Dimensions 640x640x760mm - Weight 135kg	TS
	TRAFO20	20KVA Isolation Transformer (included installation kit) Dimensions 700x700x800mm - Weight 190kg	TS
	TRAFO30	30KVA Isolation Transformer (included installation kit) Dimensions 700x700x800mm - Weight 230kg	TS
	TRAFO40	40KVA Isolation Transformer (included installation kit) Dimensions 700x700x800mm - Weight 270kg	TS
PARALLEL KITS AND CABLE	PARKIT	Parallel kit: parallel board + 1500mm cable	TS
	KRONOS-PAL	Parallel Kit: parallel board + 1500mm cable	KR
	PARCAB30	Parallel Communication Cable 3000mm	KR, TS
	PARCAB80	Parallel Communication Cable 8000mm	KR, TS
FILTER	FILTERTS10-40	Anti-Dust filter Dimensions 28,5x103x2mm	TS10~TS40
MAINTENANCE TEST	IGBTTEST	IGBT Test Power Supply +15/0/-15 Vdc 1A max	KR,TS
	LICENSE TS/KR	3 Phase UPS setting tool ENG 1 Year License	KR,TS



ENERBATT 3G

Battery Monitoring System

Extend battery life and keep
your batteries' health under control



ENERSINE

Active Power Filters

Maximum active harmonics
and power factor compensation



ATS

Automatic Transfer Switches

Reliable supply for single
corded servers



STS

Static Transfer Switches

Top performance
for high power critical loads



ENERBATT 3G

(Battery Monitoring System)

EXTEND BATTERY LIFE

Ablerex BMS extends battery life thanks to its unique built-in function of voltage equalizer. The wireless communication between the batteries and the receiver truly simplifies the installation and the maintenance of the blocks. Thanks to the RS485 communication between the RF receiver and the touch screen, it's adapted for installation in very wide plants.

PERFECT FOR:



Datacenter



Large batteries installations



Critical buildings

24/7

Monitoring

FEATURES

- Voltage Equalizer: equalizes the voltage of each battery of the string to improve battery life
- RF 2.4GHz, Wireless Communication Technology
- Easy Installation: save installation costs
- RS485 communications between RF receiver and touch screen to cover widest plant size
- Graphic LCD touch screen
- Real Time Monitoring: block voltage, block impedance, temperature, string voltage & current
- Ni-Cd Battery Measure Kit Available
- Available for different battery voltage and capacity
- Protecting cut off voltage: preserves batteries from deep discharge
- Built in SD storage memory card for battery history database up to 16GB
- Colour bar/curve diagrams
- Programmable alarm level
- Alarm via e-mail and dry contact
- Ethernet/RS-485 for Remote Monitoring
- Manage up to 750 batteries

OPTIONS

- Temperature sensor for each battery
- Additional antenna for each battery to extend wireless range
- SMK version up to 120V for higher precision
- Dedicated software for remote monitoring and data storage

BATTERY VOLTAGE EQUALIZER

Equalizes battery charge and voltage at battery level to prevent overcharging and guarantee best battery use and life. With battery equalizer function activated, each battery block voltage remains close to the ideal value. Each battery works in the best condition possible so life span is maximized.

SPECIFICATIONS

MODEL		SPECIFICATIONS								
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 x2 - 3x output and 1x input dry contact								
	Monitoring RF Receiver	Up to 63 RF receivers								
	Wireless devices	Maximum 750								
	Storage Media	Up to 16 Gigabyte SD/ flash memory card								
	Dimensions (WxHxD) mm	260 x 150 x 57								
	Weight (Kg)	0.85								
BMS-RFR (RF Receiver)	Input power supply	12Vdc								
	Power consumption	≤ 3W								
	Receiving interface	RF 2.4 GHz for wireless*								
	Wireless devices	Maximum 256								
	Dimensions (WxHxD) mm	129 x 70 x 35.5								
	Weight (Kg)	0.4								
BMS-BMK (Battery Measure Kit)	Block voltage	1.2V (Ni-Cd)	2V	6V	12V					
	Voltage measurement range	0.95-2.00V	1.48~4.00V	4.2~8.0V	8.5~16.0V					
	Accuracy	±5 mV				±10 mV				
	Battery impedance resolution	2μΩ		10μΩ		>65 Ah 15μΩ	<65 Ah 25 μΩ			
	Temperature measurement **	0~100°C ±1°C								
	Power consumption	≤ 0.5W								
	Input impedance	≥ 1MΩ								
	Dimensions (WxHxD) mm	100 x 27 x 70								
	Weight (Kg)	0.1								
BMS (Battery Monitoring System) - SMK (String Measure Kit)	Voltage measurement range	0-120V			120-750V					
	Accuracy	±0.2% of rated voltage								
	Temperature measurement **	0~100°C ±1°C								
	Current Measurement ***	0~3000 A								
	Input power supply	12 VDC								
	Power consumption	≤1.5W								
	Input impedance	≥1MΩ								
	Dimensions (WxHxD) mm	100 x 27 x 70								
	Weight (Kg)	0.09								

Specifications subject to change without notice
* Maximum transmitting distance is rated at 50m in a non-concealed room or cabinet. Recommended distance is less than 20m for optimal performance
** Optional temperature sensor (TES) is required for temperature measurement
*** Optional Hall Current transformer (HCT) s required for battery current measurement

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ENERSINE

(Active Power Filters) - Monolithic

MAXIMUM ACTIVE HARMONICS AND POWER FACTOR COMPENSATION

Ablerex Active Power Filters (APF) in monolithic topology are the best solution to compensate variable power factor and harmonics. With high current ratings from 60A to 150A they are suitable to any load size for maximum versatility of use.



Enersine 150A

PERFECT FOR:

Highly polluting loads

Motor drive systems

CNC machines

Airports

Industry

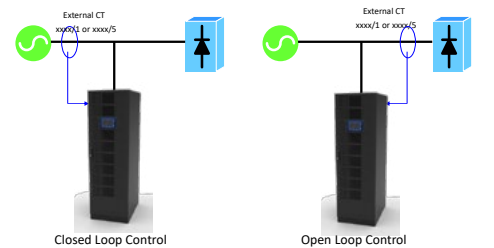
Medical

FEATURES

- 3 Level DSP based technology for top performances
- Space-saving high power density design
- The same model applies 3 Phase 3 Wires/ 4 Wires System
- Can work in closed or open loop
- Compensate up to 51st harmonics with response time of less than 1ms
- Selective mode - Choice of the harmonics to compensate
- Power Factor Correction
- Correct unbalanced three phase utility
- No overload effects
- Advanced operations interface: 7"Color LCD Touch Screen to set all system's parameters and read the 500 lines logfile
- SD card to download logfile, records waveform and parameter
- Display voltage/current waveform, parameter and frequency spectrum
- Multiple languages
- Customizable LCD SW with logo
- Complete standard communication: 3x output and 1x input dry contact, RS485 ModBus, ethernet, settable e-mail alarm



OPEN/CLOSE LOOP CONTROL



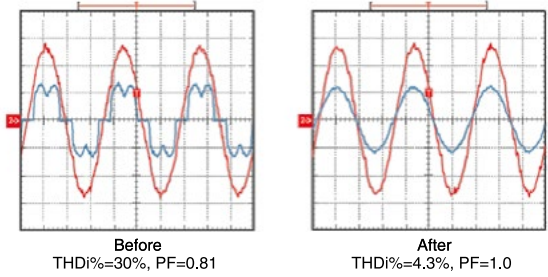
USER FRIENDLY HMI

The 7" color touch screen display of the APF lets you set all the parameters, read the logfile, download data to a removeable SD card. It can also show voltage and current waveforms, before and after the APF activation, together with the frequency spectrum through a bargraph. It can be personalized with different logo and languages.



TRUE HARMONIC & POWER FACTOR CORRECTION

Ablerex APF not only compensates harmonic current but also improves leading/lagging power factor. Enersine can compensate harmonics up to order 51st in less then 1ms.



SPECIFICATIONS

MODEL		ENERSINE 60	ENERSINE 80	ENERSINE 100	ENERSINE 150
ELECTRICAL	Input voltage	400V +15%, -20%; 480V +10%, -20%			
	Phase/Wires	3-phase 4 wires/3wires			
	Max phase compensation current per cabinet	60A	80A	100A	150A
	Frequency	50/60 ±3Hz			
	Harmonic compensation	From 2nd to 51st order			
	Power factor correction	Both lagging and leading programmable			
	Load balancing	Both phase to phase and phase to neutral			
	Reaction time	25µs			66µs
	Control algorithm	CT at Source Side: closed loop control - CT at Load Side: open loop control			
	Parallel (up to)	240A	320A	800A	1200A
COMMUNICATION	Display	7" colorful LCD touch screen			
	Dry contact	3 output dry contacts, 1 input dry contact, 1 EPO			
	Communication	USB, RS-485 modbus RTU port, ethernet port			
	Software	Dedicated monitoring and data storage software			
GENERAL	Equipment storage temperature	-20°C to +70°C			
	Operating temperature	-10°C to +40°C without derating			
	Relative humidity	<95%			
	Operating altitude	<1000m without derating			
	Reference harmonic standard	EN61000-3-4, IEEE 519-1992			
	Reference design standard	EN60146			
	Safety standard	EN50178; UL508			
	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			
	Topology	Monolithic			
PHYSICAL	Installation	Wall mount		Floor	
	Max n° of modules per cabinet (60 or 80 A, mixable)	-	-	-	-
	Max modules in parallel	4	4	8	8
	Maximum current	240A	320A	800A	1200A
	Dimensions (WxHxD) mm	500x775x286		600x1900x600	
	Weight (kg)	51	58	195	205
	IP protection degree	IP30/IP31		IP20	
	Open chassis version	-	-	YES	

Specifications subject to change without notice

ENERSINE

(Active Power Filters) - Modular

MAXIMUM ACTIVE HARMONICS AND POWER FACTOR COMPENSATION

Ablerex Active Power Filters (APF) in modular topology are the best solution to compensate variable power factor and harmonics. With high current ratings from 320A to 480A they are suitable to any load size for maximum versatility of use.



Enersine 480A

PERFECT FOR:

Highly polluting loads

Motor drive systems

CNC machines

Airports

Industry

Medical

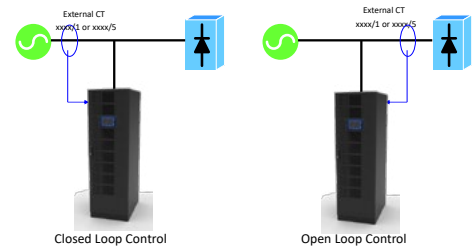
FEATURES

- 3 Level DSP based technology for top performances
- Space-saving high power density design
- The same model applies 3 Phase 3 Wires/ 4 Wires System
- Can work in closed or open loop
- Compensate up to 51st harmonics with response time of less than 1ms
- Selective mode - Choice of the harmonics to compensate
- Power Factor Correction
- Correct unbalanced three phase utility
- No overload effects
- Advanced operations interface: 7"Color LCD Touch Screen to set all system's parameters and read the 500 lines logfile
- SD card to download logfile, records waveform and parameter
- Display voltage/current waveform, parameter and frequency spectrum
- Multiple languages
- Customizable LCD SW with logo
- Complete standard communication: 3x output and 1x input dry contact, RS485 ModBus, ethernet, settable e-mail alarm

SPECIFIC FOR MODULAR

- Easy hot-scalable and hot-swappable power modules
- 60 or 80A per module, up to 1920A with 24 in parallel
- 1 LCD screen for all the parallel system
- 1 Control Module for 8 Power Modules
- Easy to install in standard 19" rack cabinet

OPEN/CLOSE LOOP CONTROL



USER FRIENDLY HMI

The 7" color touch screen display of the APF lets you set all the parameters, read the logfile, download data to a removeable SD card. It can also show voltage and current waveforms, before and after the APF activation, together with the frequency spectrum through a bargraph. It can be personalized with different logo and languages.



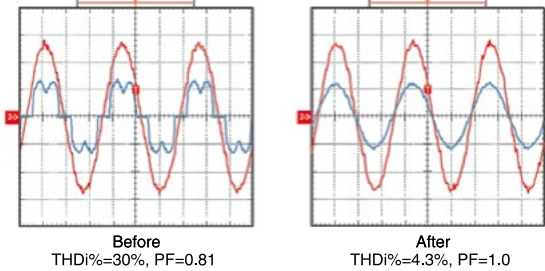
SPECIFICATIONS

MODEL		ENERSINE 320	ENERSINE 480
ELECTRICAL	Input voltage	400V +15%, -20%; 480V +10%, -20%	
	Phase/Wires	3-phase 4 wires/3wires	
	Max phase compensation current per cabinet	320A	480A
	Frequency	50/60 ±3Hz	
	Harmonic compensation	From 2nd to 51st order	
	Power factor correction	Both lagging and leading programmable	
	Load balancing	Both phase to phase and phase to neutral	
	Reaction time	66µs	
	Control algorithm	CT at Source Side: closed loop control - CT at Load Side: open loop control	
COMMUNICATION	Parallel (up to)	1440A	1920A
	Display	7" colorful LCD touch screen	
	Dry contact	3 output dry contacts, 1 input dry contact, 1 EPO	
	Communication	USB, RS-485 modbus RTU port, ethernet port	
GENERAL	Software	Dedicated monitoring and data storage software	
	Equipment storage temperature	-20°C to +70°C	
	Operating temperature	-10°C to +40°C without derating	
	Relative humidity	<95%	
	Operating altitude	<1000m without derating	
	Reference harmonic standard	EN61000-3-4, IEEE 519-1992	
	Reference design standard	EN60146	
	Safety standard	EN50178; UL508	
	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	
PHYSICAL	Topology	Modular	
	Installation	Floor	
	Max n° of modules per cabinet (60 or 80 A, mixable)	4	6
	Max modules in parallel	24	24
	Maximum current	1920A	
	Dimensions (WxHxD) mm	600x1500x900	600x1950x900
	Weight (kg)	161	207
	IP protection degree	IP21	
	Open chassis version	-	

Specifications subject to change without notice

TRUE HARMONIC & POWER FACTOR CORRECTION

Ablerex APF not only compensates harmonic current but also improves leading/lagging power factor. Enersine can compensate harmonics up to order 51st in less than 1ms.



ATS

(Automatic Transfer Switch)

RELIABLE SUPPLY FOR SINGLE CORDED SERVERS

Highly reliable Automatic Transfer Switch with user friendly interface.
Hot swappable version for maximum supply availability.



PERFECT FOR:

APP

IT applications

Single corded servers

Alarm & security systems

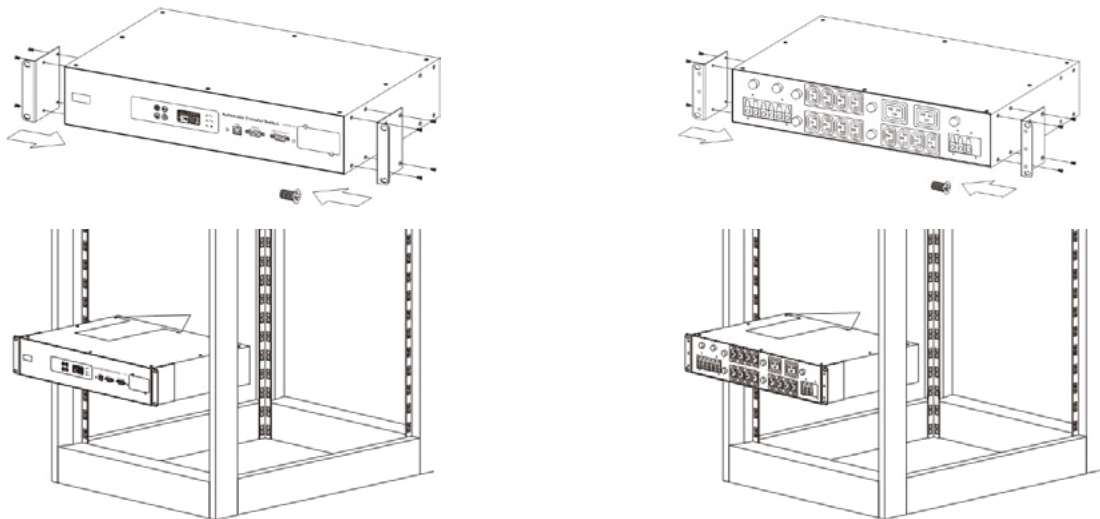
FEATURES

- Two separate independent sources
- Provide redundant power supply to single corded equipment
- Fast automatic switch between two sources
- High reliability
- User friendly operation with LCD/LED display
- Single phase 16A/32A
- 19" rack design
- ITS version: hot swappable ATS version for maintenance purposes
- Proven field measured reliability
- Programmable output dry contact
- EPO – Emergency Power Off
- New Output terminals for 32A : 12x IEC C13 + 2x IEC C19 + 1x full rated hard wired terminals
- Output terminals for 16A : 8x IEC C13 + 1x IEC C19

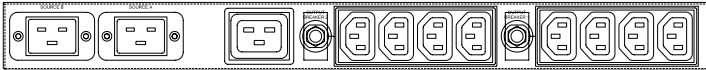
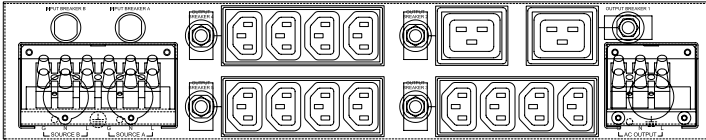
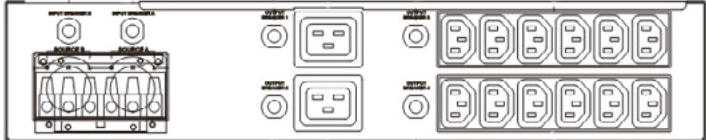
OPTIONS

- 120V versions available
 - ITS with single full load terminal output
- IEC Lockable available

ATS REVERSABLE INSTALLATION



SPECIFICATIONS

MODEL		ATS-16A-1P		ATS-32A-1P		ITS-32A-1P		
INPUT	Voltage		200/208/220/230/240 Vac (±5%/10%/15%/20%)			200/208/220/230/240 Vac (±5%/10%/15%/20%)		
	Acceptable voltage		150~300Vac			150~300Vac		
	Frequency		50/60Hz (±5%/10%/15%/20%)					
	Maximum input current		16A		32A		32A	
OUTPUT	Voltage		200/208/220/230/240 Vac			200/208/220/230/240 Vac		
	Maximum output current		16A		32A		32A	
	Transfer time (ms)		8~12ms (typical)			8~12ms (typical)		
PROTECTION			Output short circuit/ Internal electronic circuit/ Electronic circuit					
INTERFACE	Standard		RS232, USB, 5x output dry contacts, comm. slot, EPO					
	Option		RS485, SNMP					
	Display		LED - Source A and/or B available, fault conditions LCD - alarms, measures, faults					
PHYSICAL	Inlet		IEC-C20 x2		30A cable terminal x2		30A cable terminal x2	
	Outlet		IEC-C13 x8 IEC-C19 x1		IEC C13 x 12 IEC C19 x2 Full load terminal		IEC-C13 x12 IEC-C19 x2	
	Dimensions (WxHxD) mm		440x44x275		440x88x275		440x88x346	
	Net Weight (kg)		4		6		8	
ENVIRONMENT	Operating temperature		-5~+40°C @0%~90% (non-condensing)					
	Safety	Safety	IEC EN 60950-1					
		EMC	IEC EN 62310-2					
BACK PANELS	<div>ATS-16A-1P</div> 							
	<div>ATS-32A-1P</div> 							
	<div>ITS-32A-1P</div> 							

Specifications subject to change without notice

STS


(Static Transfer Switches)


TOP PERFORMANCE FOR HIGH POWER CRITICAL LOADS


High performance STS, up to 3000A with extremely short transfer time (<=4ms).
Its overload capability enables its use also in heavy duty applications.
Thanks to its internal redundancy and oversizing it guarantees maximum reliability.



PERFECT FOR:


IT applications


Single corded servers supply


Industry

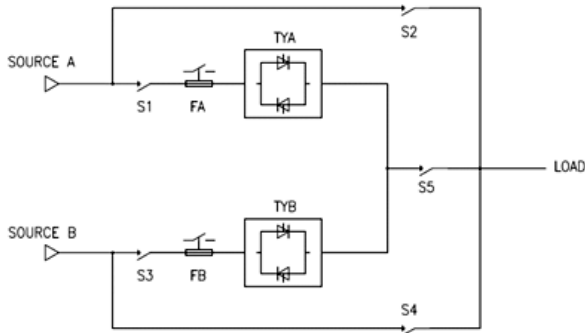
FEATURES

- Voltage and frequency continuous monitoring
- Extremely rapid automatic transfer (<= 5ms), without sources connection
- No transfer under short circuit after the STS, to keep up the current until the correct protections work
- Continuous check of the SCR proper working and backfeed protection
- Dual bypass, one per source, to achieve total sources independence in case of maintenance
- Maximum reliability thanks to redundant internal power supplies and cooling, plus oversizing of the neutral
- Front access for easy maintenance
- Bottom connection as a standard, top connection possible to simplify installation in any condition
- Dry contacts, RS232, RS485 included
- Use of Circuit Breakers, for best protection in all conditions
- Operation without Neutral

OPTIONS

- Isolation transformer
- Plug-in breakers
- Additional dry contact board
- 4-pole configuration
- E-box open chassis version

STS BLOCK DIAGRAM



SPECIFICATIONS

MODEL		STS63A-1p		STS63/100/125/160A-3p			STS200/250/320/400A-3p				STS630/800/1000/1250A-3p				
RATING (A)		63		63	100	125	160	200	250	320	400	630	800	1000	1250
Dimensions (WxDxH) mm		440x400x132		650X780X1400			860x860x2000				1060x660x2000		1860x860x2000		
Weight (Kg)		22		240	265	265	283	310	310	330	340	410	480	650	700
INPUT	Connection type	Hardwired 2W		Hardwired 4Wires											
	Nominal voltage Vac	208/220/230/240		208/220/230/380/400/415/460/480 Vac 3-phase with neutral											
	Voltage tolerance	±15% (adjustable)													
	Frequency and range	50/60Hz, ±1 or 5 % Selectable													
	Source THDv	Up to 10%													
	Transfer phase angle	7° to 15°													
OUTPUT	Connection type	Hardwired 2W		Hardwired 4w											
	Transfer time	≤5ms Sync, 11/21ms Selectable for No Sync													
	Transfer mode	Break before make, transfer inhibit on fault													
	Load power factor	1 to 0.3													
	Maximum crest factor	3:1													
	Load THDi feedback	Unlimited													
	Overload capacity	110% for 60 min, 125% for 10 min, 150% for 2 min, 200% for 5s													
	Short-circuit capacity	3 In													
	Efficiency (AC/AC)	> 98.8%		> 98.5%		> 98.8%			> 98.9%						
CONNECTION &FUNCTION EXTENSIONS	Front panel	Mimic LED panel and keybord		Graphic LCD display, mimic LED panel and keyboard											
	Remote communication	1 Dry contact programmable		Included: 9 dry contacts (3 fixed, 6 programmable), RS232 ial ports, ModBus-RTU protocol Optional: additional dry contact card											
	Optional function	2-pole configuration		4-pole configuration: plug-in circuit breakers; operation without neutral;											
SYSTEM	Protection degree	IP 21 (other options)													
	Colour	RAL 9011 (other options)													
	Installation layout	Rack 19"		Wallmounted back to back and side by side installation allowed											
	Accessibility	Rear side		Front access, bottom and top cable entry											
ENVIRONMENT	Operating temperature range	-5°C to +40°C													
	Storage temperature range	-10°C to +55°C													
	Altitude	< 1000m without power reduction >1000m with reduction of 0,6% per 100m													
	Audible noise @ 1m (dBA)	<48		<58			<60		<62			<63		<64	
STANDARDS & CERTIFICATIONS	Quality assurance	ISO 9001:2008													
	Safety	IEC EN 62310-1													
	EMC	IEC EN 62310-2													
	Breakers	IEC 60947-3													
	Data Center Classification	TIER IV													
	Performance	IEC EN 62310-3													
	Marking	CE													

Specifications subject to change without notice



Ablerex designs a comprehensive portfolio of Uninterruptible Power Supplies (UPS) and Power Quality Devices (PQD) since 1994 with a R&D team of more than 150 engineers and 1200 employees.

The products are manufactured in our facilities in Italy, Taiwan and China to best cover the local markets needs in terms of specifications and delivery time.

Our subsidiaries in Milan (IT), Taipei (TW), Los Angeles (USA), Miami (USA), Beijing (CN), Tokyo (JP) and Singapore (SG) are in charge of distribution and support for our customers.

We are active in various market segments including Datacenters, Industry, Telecom, Corporate IT, Home and Consumer.

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