



Gamatronic's Products



GAMATRONIC

Our Power, Your Confidence



Power + Sa

10 - 40 KVA

Lower TCO & increase ROI:

- SAVE ON purchasing & installation costs
- SAVE ON electricity costs
- SAVE ON maintenance costs
- SAVE ON spacing costs
- SAVE ON cooling costs
- SAVE ON generator costs

General product Features:

- Ultrahigh power density
- True green power and high efficiency
- Universal UPS: frequency / voltage / phase configurable on site
- User friendly
- Maximum power availability
- True online batteries and double conversion VFI topology
- Power with environmental integrity
- Power+ controller: full remote UPS management, automatic server shutdown, alerts, and management of SNMP trap by interfacing with NMS software (a standard feature in the 19" model and optional in SA models)



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Power + SA 10-40KVA Specification

Model	P+SA 10KVA	P+SA 20KVA	P+SA 30KVA	P+SA 40KVA
Capacity (VA/WATT)	10KVA/8KVA	20KVA/16KVA	30KVA/24KVA	40KVA/32KVA
Input				
Nominal Input Voltage	3x(380-415 V) + N +PE			
Input Voltage range	-27% and +20%			
Input Frequency range	45-65 Hz			
Input Power factor	1			
Power walkin	<60 S			
Input THDi	less than 5%			
Bypass				
Bypass Voltage	3x(380-415 V)			
Bypass Frequency range	45-65 Hz			
Transfer time	0 ms			
Output				
Output Voltage	3x 400 V + N + PE			
Voltage regulation	+/- 1%			
Output Frequency	50Hz			
Frequency tracking range	+/-3%	+/-0.5,+/-1,+/-2,+/-3,+/-4 (Selectable)		
Slew rate	1 Hz/sec			
Dynamic response to 100% load step	2%			
Crest Factor	6:1			
Harmonic distortion (THDv)	Less than 2% for linear load			
Efficiency	98%			
Output Power Factor	0.8			
Waveform	Sinusoidal			
Battery				
Battery DC Voltage	+/-432	+/-432	+/-432	+/-432
Battery Type	Sealed Lead Acid Type			
Battery number	12 V X (5Ah) 64 Blocks	12 V X 64 Blocks	12 V X 64 Blocks	12 V X 64 Blocks
Backup time	8 Min @ 100% load;25 Min @ 50% Load	depend on load		
Typical recharge time	4-6 Hours			
System Features				
LCD /LED indicators	Input/Output : Voltage ,Frequency, Current			
Log Event (Memory)	Last 256 Events			
Protection	IP20			
Overload capacity	110% for 10 Mins,125% for 60 S , 1000% for 1 cycle			
MTBF	250000 Hours			
Communication interface				
Dry contact alarm,RS232 and SNMP (Optional)				
Physical				
Dimension (DxWxH)mm.	600x90x560	580x480x660	580x480x660	580x480x660
Net Weight (KGS)	18Kgs	50 Kgs	59Kgs	68 Kgs
Environmental				
Operation temperature	-10 °C to +40 °C			
Storage Temperature	-20 °C to +70 °C			
Relative Humidity	95% Max non-condensation			
Noise level	47 dB at 1.5 meter	54 dB at 1.5 meter		
Altitude	1500 M without derating			
Standards				
Safety	IEC 62040-1			
EMC	IEC 62040-2			
Design	IEC 62040-3			
Low Magnetic field radiation	EMF as per ICNIRP			



CENTRIC

50 - 200 KVA



Standard Features

- Advanced colorful LCD touch screen.
- True on-line battery.
- Up to 96% efficiency.
- High power output & small footprint.
- Light weight.
- Modular UPS.

Additional features are available:

- Manual maintenance bypass switch.
- Email notification of system alarms.
- Modbus / RS232 / RS485 communication protocols.
- Automatic, orderly shutdown of connected computers during a power blackout.



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CENTRIC 50-200KVA Specification

Model	50 KVA	75 KVA	100 KVA	125 KVA	150 KVA	200 KVA
Capacity (VA/WATT)	50 KVA/50 KW	75 KVA/75KW	100 KVA/100 KW	125 KVA/125 KW	150 KVA/150 KW	200 KVA/200 KW
Input						
Nominal Input Voltage	3x 400 V + N (+10%/-15%)					
Input Voltage range	364-457 V					
Input Frequency range	47-63 Hz					
Input Power factor	>0.99					
Max.Input current (A)	3x42 A per module					
Power walkin	<60 s					
Input THDi	less than 3%					
Bypass						
Bypass Voltage	3x400 V					
Bypass Frequency range	47-63 Hz					
Transfer time	0 msec					
Output						
Output Voltage	3x400 V					
Voltage regulation	+/-1%					
Output Frequency	+/-0.1 %					
Frequency tracking range	+/- (0.5,1,2,3)Hz selectable					
Slew rate	1 Hz/sec					
Dynamic response to 100% load step	+/-2%					
Crest Factor	6:1					
Harmonic distortion (THDv)	Less than 2% (Linear),less than 8% (Non linear)					
Efficiency	96%					
Output Power Factor	1					
Waveform	Sinusoidal					
Battery						
Battery DC Voltage	300-405 V					
Battery Type	Sealed Lead Acid Type					
Battery number	12V x 60 Blocks					
Backup time	Depend on load					
System Features						
LCD /LED indicators	Input/Output : Voltage ,Frequency, Current					
Log Event (Memory)	Last 500 Events					
Protection	IP20					
Overload capacity	110% for 10 Mins,125% for 60 Sec,1000% for 1 cycle					
Communication interface	RS232,RS485,TCP/IP,SNMP,MODBUS					
Physical						
Dimension (DxWxH)mm.	731.5x540x931	731.5x540x932	731.5x540x933	731.5x540x1450	731.5x540x1450	731.5x540x1450
Net Weight (KGs)	98.6	117.2	135.7	162.9	181.4	218.5
Environmental						
Operation temperature	-10 °C to +40 °C					
Storage Temperature	-20 °C to +60 °C					
Relative Humidity	95% Max non-condensation					
Noise level	55 dB	55dB	55dB	60 dB	60 dB	60 dB
Altitude	1500 M without derating					
Standards						
Safety	IEC 62040-1					
EMC	IEC 62040-2					
Design	IEC 62040-3					
Low Magnetic field radiation	EMF as per ICNIRP					



μ PS-SP

3/1 6 - 80 KVA

3/3 10 - 200 KVA

Main Features

- True Double Conversion on-line topology
- On-line batteries. No transfer time to batteries
- Precise DC voltage regulation of $\pm 1\%$
- Full microprocessor control
- Variety of options, configurable from panel
- Output isolation transformer
- DC Soft-Start
- Enlarged charger for longer backup time
- Automatic and manual battery tests
- Operates with both symmetrical and non-symmetrical loads, and linear and non-linear loads
- Designed for both Wye and Delta load connections
- Various input/output voltages and frequencies
- Large LCD display
- Logs up to 256 events
- RS232 interface with smart software option
- Real time clock
- Independent output voltage control for any single phase
- Charger Voltage regulation according to EURO BATT requirements

Options

- External STSW module connection for increased reliability
- Redundant parallel connection, with active current sharing
- 12-pulse rectifier
- Input filter for 7%-10% THDI
- Isolation transformer for static switch
- High input PF 0.95-0.96
- Battery charge current limit
- SNMP management
- WING - wireless management card



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UPS-SP 3/1 6-80KVA Specification

Model	6 KVA	8 KVA	10 KVA	15 KVA	20 KVA	30 KVA	40 KVA	50 KVA	60 KVA	80 KVA
Capacity (VA/WATT)	6KVA/4.8KW	8KVA/6.4KW	10KVA/8KW	15KVA/12KW	20KVA/16KW	30KVA/24KW	40KVA/32KW	50KVA/40KW	60KVA/48KW	80KVA/64KW
Input										
Nominal Input Voltage	3x380/400/415 (208/220 optional)									
Input Voltage range	+20% and -15%									
Input Frequency range	47-53 Hz (57-63 Hz)									
Input Power factor	0.8 (0.92-0.94 with optional filter)									
Power walkin	12 Sec									
Input THDi	28% (7-10% with optional filter)									
Bypass										
Bypass Voltage	220/230/240 (120 optional),No DC component									
Bypass Frequency range	47-53 Hz (57-63 Hz)									
Transfer time	less than 0.5 msec									
Output										
Output Voltage	220/230/240 (120 optional),No DC component									
Voltage regulation	+/-1%									
Output Frequency	50 Hz									
Frequency tracking range	+/- (0.5,1,2,3,4)Hz selectable									
Slew rate	1 Hz/sec									
Dynamic response to 100% load step	2%									
Crest Factor	3:1									
Harmonic distortion (THDv)	less than 2% (Linear load)									
Efficiency	90.5%			91.5%		92.0%		92.3%		92.5%
Output Power Factor	0.8									
Waveform	Sinusoidal									
Battery										
Battery DC Voltage	432 Vdc									
Battery Type	Sealed lead Acid Type									
Battery number	12Vx 32 Blocks									
Backup time	Depend on load									
Typical recharge time	Approx. 6-8 Hours					Approx. 4-6 Hours				
System Features										
LCD /LED indicators	Input/Output/Bypass : Voltage ,Frequency, Current (Optional) / Battery Voltage									
Log Event (Memory)	Last 256 Events									
Protection	Overload,short circuit and overheat protection (Heat sink ,Isolation transformer and Inverter transformer)									
Overload capacity	125% for 10 Mins,150% for 30 Sec, 1000% for 1 cycle									
MTBF	100000 Hour and 250000 Hours with static switch									
Communication interface	RS232,WING-GSM/GPRS Wireless management card (Option),SNMP TCP/IP management card (Option),Shutdown software									
Physical										
Dimension (DxWxH)mm.	80x24x75			83.5x40x95			111x55.5x130			80x70x190
Net Weight (KGs)	90	95	95	95	115	180	225	370	400	525
Environmental										
Operation temperature	-10 °C to +40 °C									
Storage Temperature	-20 °C to +60 °C									
Relative Humidity	95% Max non-condensation									
Noise level	51 dB	52 dB	53 dB	56 dB	60 dB	62 dB		64 dB		
Altitude	1500 M without derating									
Standards										
Safety	IEC 62040-1									
EMC	IEC 62040-2									
Design	IEC 62040-3									
Low Magnetic field radiation	EMF as per ICNIRP									

UPS-SP 3/3 10-200KVA Specification

Model	10 KVA	15 KVA	20 KVA	30 KVA	40 KVA	50 KVA	60 KVA	80 KVA	100 KVA	125 KVA	160 KVA	200 KVA
Capacity (VA/WATT)	10KVA/8KW	15KVA/12KW	20KVA/16KW	30KVA/24KW	40KVA/32KW	50KVA/40KW	60KVA/48KW	80KVA/64KW	100KVA/80KW	125KVA/100KW	160KVA/128KW	200KVA/160KW
Input												
Nominal Input Voltage	3x380/400/415 (208/220 optional)											
Input Voltage range	+20% and -15%											
Input Frequency range	47-53 Hz (57-63 Hz)											
Input Power factor	0.8 (0.92-0.94 with optional filter)											
Power walkin	12 Sec											
Input THDi	28% (7-10% with optional filter)											
Bypass												
Bypass Voltage	3x380/400/415 (208/220 optional)											
Bypass Frequency range	47-53 Hz (57-63 Hz)											
Transfer time	0 msec											
Output												
Output Voltage	3x380/400/415 (208/220 optional)											
Voltage regulation	+/-1%											
Output Frequency	50 Hz											
Frequency tracking range	+/- (0.5,1,2,3,4)Hz selectable											
Slew rate	1 Hz/sec											
Dynamic response to 100% load step	2%											
Crest Factor	3:1											
Harmonic distortion (THDv)	less than 2% (Linear load)											
Efficiency	93%	94%	94%	94%	94.50%	94.50%	94.50%	95.00%	95%	95%	95.50%	95.50%
Output Power Factor	0.8											
Waveform	Sinusoidal											
Battery												
Battery DC Voltage	432 Vdc											
Battery Type	Sealed lead Acid Type											
Battery number	12Vx 32 Blocks											
Backup time	Depend on load											
Typical recharge time	Approx. 6-8 Hours											
System Features												
LCD /LED indicators	Input/Output/Bypass : Voltage ,Frequency, Current (Optional) / Battery Voltage											
Log Event (Memory)	Last 256 Events											
Protection	Overload,short circuit and overheat protection (Heat sink ,Isolation transformer and Inverter transformer)											
Overload capacity	125% for 10 Mins,150% for 30 Sec, 1000% for 1 cycle											
MTBF	100000 Hour and 250000 Hours with static switch											
Communication interface	RS232,WING-GSM/GPRS Wireless management card (Option),SNMP TCP/IP management card (Option),Shutdown software											
Physical												
Dimension (DxWxH)mm.	80x24x75	80x24x75	83.5x40x95	83.5x40x95	80x55.5x130	80x55.5x130	80x55.5x130	80x70x190	80x70x190	80x70x190	80x135x190	80x135x190
Net Weight (KGs)	105	125	190	230	260	370	380	500	590	740	1000	1111
Environmental												
Operation temperature	-10 °C to +40 °C											
Storage Temperature	-20 °C to +60 °C											
Relative Humidity	95% Max non-condensation											
Noise level	60 dB	60 dB	61 dB	61 dB	62 dB	62 dB	62 dB	65 dB	65 dB	65 dB	67 dB	68 dB
Altitude	1500 M without derating											
Standards												
Safety	IEC 62040-1											
EMC	IEC 62040-2											
Design	IEC 62040-3											
Low Magnetic field radiation	EMF as per ICNIRP											