



HP9116C Series High Frequency Online UPS

1-3KVA(1 Ph in/1Ph out)



► Product snapshot:

Model: 1-3KVA

Nominal voltage: 208/220/230/240VAC

Nominal frequency: 50/60Hz

Output Power factor: 0.7/0.8 (Optional)

Safe and reliable protection

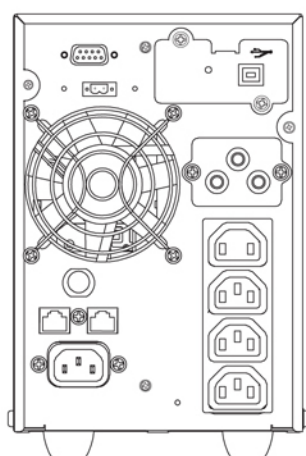
High frequency online UPS HP9116C (1ph in/1ph out) 1-3KVA series have a high stability and reliability which was designed by ARAKAWA company according to Japan power grid environment and network system requirements. Its excellent quality and perfect usability can provide a safe and reliable guarantee for the computer network system and realize overall protection to user devices.

Key Features

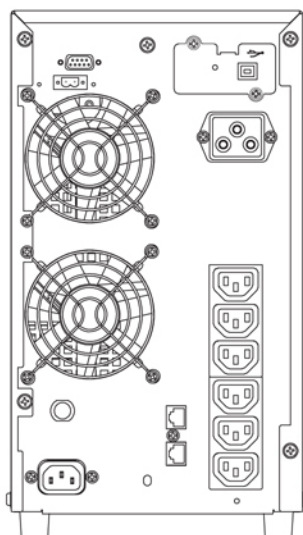
- Large blue backlight LCD for detailed real-time UPS status display.
- Pure sine wave double conversion online UPS with voltage regulator circuit, which can provide a perfect power protection when UPS working in a harsh surroundings.
- Comprehensive electric isolation and bypass protection.
- Input PF correction technology, reduce harmonic pollution to the power grid.
- Automatic alarm; Self-testing function.
- Wide Input frequency range can connect various fuel generators.
- Adopt intelligent battery management, saving charging time and extend battery life.
- DC start when power off, convenient and reliable; restart automatically when electricity is restored.



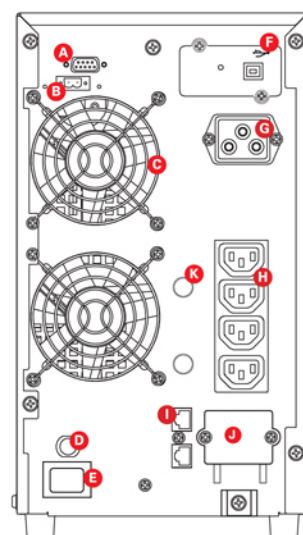
Back Panel Description:



HP9116C 1KVA



HP9116C 2KVA



HP9116C 3KVA

- A** Communication Port
- B** EPO
- C** Cooling Fan
- D** Breaker
- E** Input Plug
- F** Intelligent Slot /USB Port(Optional)
- G** External Battery Socket (For Long Backup Time UPS Only)
- H** Output Socket
- I** Network/Fax/Modem Surge Protection
- J** Output Terminal
- K** Fuse

Available sockets



Italian Socket



CEE



Universal Socket



NEMA



British Socket



Australia Socket

HP9116C series Technical Specifications

Model	HP9116C 1-3KVA						
	1KT	1KT-XL	2KT	2KT-XL	3KT	3KT-XL	
Rated Power	1KVA/0.7KW		2KVA/1.4KW		3KVA/2.1KW		
Rated Voltage	220/230/240VAC						
Rated Frequency	50/60 Hz						
Input							
Voltage Range	115~295VAC (±3VAC)						
Frequency Range	50HZ: (46~54HZ) ; 60HZ: (56HZ~64HZ)						
Power Factor	>0.98						
Output							
Voltage Regulation	220/230/240X (1±2%)VAC						
Frequency Regulation	50/60Hz ±0.05Hz						
Power Factor	0.7/0.8 (Optional) Standard 0.7						
Voltage Distortion	Linear load< 3% Non-linear load< 6%						
Overload Capability	110%~150% for 30 sec; ≥150% for 200ms						
Current Crest Ratio	3 : 1						
Transfer Time	0ms (AC mode →Battery mode)						
Battery							
DC Voltage	36VDC		96VDC		96VDC		
Recharge Time	5 hours to 90% of capacity after full load discharge						
Recharge Current	1A	4A/8A (Optional)	1A	4A/8A (Optional)	1A	4A/8A (Optional)	
Display							
LCD	Display input/output Voltage, Frequency, Battery voltag, Battery capacity, Loading rate.						
Communication							
Interface	Smart RS232、SNMP (Optional) 、USB (Optional)						
Environment							
Operation Temperature	0~40℃						
Humidity	0~95% (Non-condensing)						
Storage Temperature	-25℃~55℃						
Sea Level Elevation	<1500m						
Noise Level (1m)	<45dB		<50dB		<50dB		
Physics Characteristic							
Weight (KG)	N.W	14	7	31	13.5	31.5	14
	G.W	16	9	33	16	33.5	16.5
Dimensions : (W x D x H)mm		145X400X220		192X460X340			

STANDARD: Conform to GB/IEC regulation: EMC:GB7260.2/IEC62040-2 GB/17626.2~5/IEC61000-4-2~5 SAFETY:GB4943

Note: Product specifications are subject to change without further notice.



HP9116C HP9316C Series High Frequency Online UPS

6-20KVA(1 Ph in/1Ph out & 3 Ph in/1Ph out)



► Product snapshot:

Model: 6-20KVA

Nominal voltage: 208/220/230/240VAC

Nominal frequency: 50/60Hz

Output Power factor: 0.7/0.8 (Optional)

Key Features

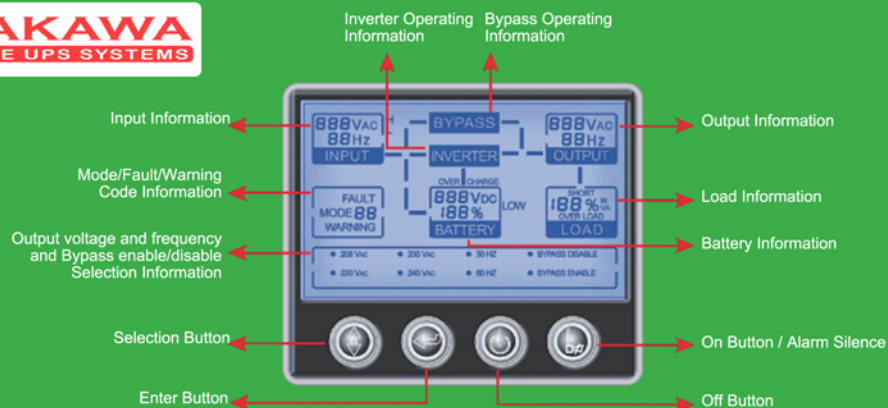
- Large blue black light LCD for detailed real-time UPS status display.
- Advanced online pure sinewave power supply system, with bypass maintain switch, It can provide a reliable, high quality AC power source to the precision equipments, can be used widely in different fields.
- Widely used to computer equipments, telecommunication systems and industrial automatic control equipments.
- Truly online design, it can adjust the input voltage, filtering, when the AC break off, the UPS will provide an uninterruptible power source from the backup batteries.
- UPS will change to bypass mode when overloading or inverter fault, when over-loading remove, UPS will turn to inverter mode automatically.
- N+X Parallel Redundancy and Capacity expansion for 6K-20K (Up to three units) .



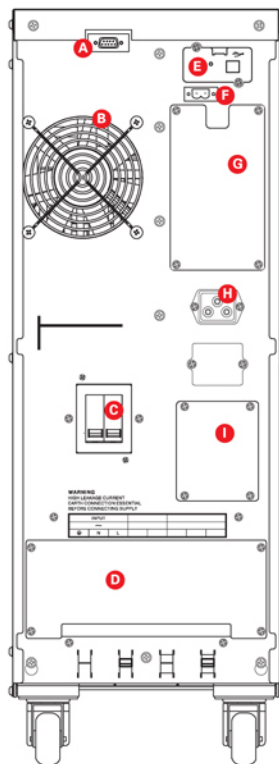
Stable and Reliable, Comprehensive Protection

HP9116C HP9316C series of single phase in/single phase out with high frequency online double conversion UPS is a stability and reliability UPS system which was designed by ARAKAWA company according to Japan power grid environment and network systems requirements. Its excellent quality and perfect usability can provide the network power supply a safe and reliable protection, satisfy the users' requirements of protecting overall equipments.

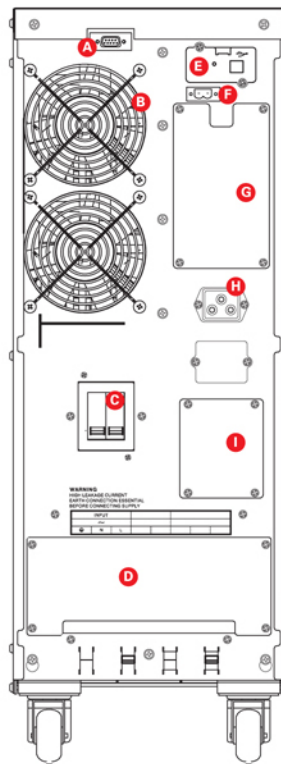
Elegant LCD Design for real-time UPS system information



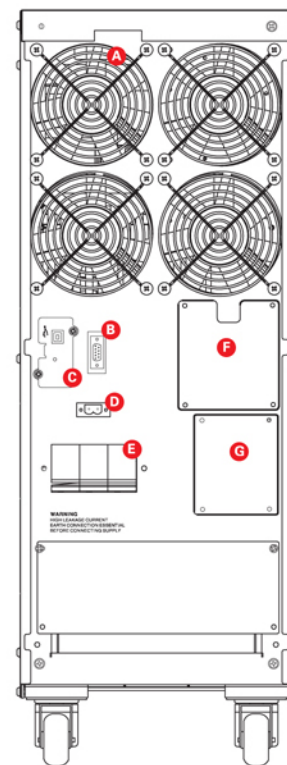
Back Panel Description:



HP9116C 6KVA



HP9116C 10KVA



HP9316C 15/20KVA

- A** Communication Port
- B** Cooling Fan
- C** Input Breaker
- D** Terminal Blocks Cover
- E** Intelligent Slot /USB Port (Optional)
- F** EPO
- G** Parallel Port
- H** External Battery (For Long Backup Time UPS Only)
- I** Maintenance Bypass Switch

- A** Communication Port
- B** Cooling Fan
- C** Input Breaker
- D** Terminal Blocks Cover
- E** Intelligent Slot /USB Port (Optional)
- F** EPO
- G** Parallel Port
- H** External Battery Socket (For Long Backup Time UPS Only)
- I** Maintenance Bypass Switch

- A** Fan
- B** RS232
- C** Intelligent Slot /USB Port(Optional)
- D** EPO
- E** Input Breaker
- F** Parallel Port
- G** Maintenance Switch



HP9116C series Technical Specifications

Model	HP9116C 6-10KVA			
	6KT	6KT-XL	10KT	10KT-XL
Rated Power	6KVA/4.2KW		10KVA/7KW	
Rated Voltage	220/230/240VAC			
Rated Frequency	50/60 Hz			
Input				
Voltage Range	176~279VAC (±3VAC)			
Frequency Range	50HZ: (46~54HZ) ; 60HZ: (56HZ~64HZ)			
Power Factor	0.98			
Output				
Voltage Regulation	208/220/230/240X (1±2%)VAC			
Frequency Regulation	50/60 Hz±0.05Hz			
Power Factor	0.7/0.8 (Optional) Standard 0.7			
Voltage Distortion	Linear load<3% Non-linear load<6%			
Overload Capability	105%~130% for 10 min; ≥130% for 1min			
Current Crest Ratio	3 : 1			
Transfer Time	0 ms (AC mode→Battery mode)			
Battery				
DC Voltage	240 VDC			
Recharge Time	7hrs to 90% of capacity after full load discharge			
Recharge Current	2A	4.2A	2A	4.2A
Display				
LCD	Display input/output Voltage, Frequency, Battery voltage, Battery capacity, Loading rate.			
Communication				
Interface	Smart RS232、SNMP card (optional) 、USB (optional)			
Environment				
Operation Temperature	0~40℃			
Humidity	0~95% (Non-condensing)			
Storage Temperature	-25℃~55℃			
Sea Level Elevation	<1500m			
Noise Level (1m)	<55dB			
Physics Characteristic				
Weight (KG)	N.W	79.0	33.5	81.5
	G.W	87.5	39.5	90.0
Dimensions : (Wx D x H)mm		260X570X717		

STANDARD: Conform to GB/IEC regulation: EMC:GB7260.2/IEC62040-2 GB/17626.2~5/IEC61000-4-2~5 SAFETY:GB4943

Note: Product specifications are subject to change without further notice.

HP9316C series Technical Specifications

Model		HP9316C 10-20KVA		
		10KT-XL	15KT-XL	20KT-XL
Rated Power		10KVA/7KW	15KVA/10.5KW	20KVA/14KW
Rated Voltage		380VAC 3phase with ground		
Rated Frequency		50/60HZ		
Input				
Voltage Range		304~478VAC (±3VAC)		
Frequency Range		50HZ: (46~54HZ) ; 60HZ: (56HZ~64HZ)		
Power Factor		0.98		
Output				
Voltage Regulation		208/220/230/240X (1±2%)VAC		
Frequency Regulation		50/60HZ±0.05 Hz		
Power Factor		0.7/0.8 (optional) standard 0.7		
Voltage Distortion		Linear load<3% Non-Linear load<6%		
Overload Capability		105%~130% for 10min, ≥ 30% for 1min		
Current Crest Ratio		3 : 1		
Transfer Time		0 ms (AC mode→Battery mode)		
Battery				
DC Voltage		240VDC		
Recharge Current		4.2A		
Display				
LCD		Display input/output Voltage, Frequency, Battery voltage, Battery capacity, Loading rate.		
Communication				
Interface		Smart RS232、SNMP(optional) 、USB (optional)		
Environment				
Operation Temperature		0~40℃		
Humidity		0~95% (Non-condensing)		
Storage Temperature		-25℃~55℃		
Sea Level Elevation		<1500m		
Noise Level (1m)		<55dB		
Physics Characteristic				
Weight (KG)	N.W	47.0	51.2	51.2
	G.W	53.0	58.5	58.5
Dimensions : (Wx D x H)mm		260X570X717		

STANDARD: Conform to GB/IEC regulation: EMC:GB7260.2/IEC62040-2 GB/17626.2~5/IEC61000-4-2~5 SAFETY:GB4943

Note: Product specifications are subject to change without further notice.



LOCAL AREA
NETWORKS
(LAN)



SERVERS



DATA
CENTERS



TELECOM-
MUNICATION
DEVICES



E-BUSINESS
(Servers Farms,
ISP/ASP/POP)



INDUSTRIAL
PROCESSES



INDUSTRIAL
PLCS



ELECTRO-
MEDICAL
DEVICES



EMERGENCY
DEVICES
(Lights/Alarms)

GP9332C Series

10–120 kVA (3Ph in/3Ph out)



ABSOLUTE PROTECTION

GP9332C is an on-line double conversion UPS (VFI SS 111 in accordance with IEC EN 62040-3) with a transformer isolated inverter. GP9332C has a compact foot print and high quality output to provide the ultimate power protection for "mission critical" applications: data processing, telecommunications, industrial processes, security and electro-medical systems.

The GP9332C range includes three-phase output models from 10 to 120kVA. Models from 10-120kVA are available with a 6 pulse rectifier.

EASY SOURCE

GP9332C technology removes the problems of over sizing upstream power sources, whilst improving load power factors and current harmonics. The UPS features the latest input-current absorption techniques including progressive rectifier start-up and the option to reduce battery charging currents. These features make GP9332C one of the most generator and environmentally friendly UPS available.

POWER CONTINUITY

ARAKAWA has been researching and developing UPS technologies for critical applications, worldwide and for many years. ARAKAWA solutions are flexible, offering the highest levels of availability, whilst achieving low total cost of ownership.

ARAKAWA are designed to be resilient, with key component inbuilt redundancy. The UPS are designed for ease of installation and maintenance, with top entry cable cabinet options, and simple but secure access to connection terminals and communications interfaces.

MAXIMUM LEVELS OF RELIABILITY AND AVAILABILITY

Distributed or centralised parallel up to 8 units per backup (N+1) or power parallel. A parallel between models with different power levels is possible.
Hot System Expansion (HSE) : HSE allows the insertion of a new UPS within an existing system, without the need to switch off the UPSs which are already operating or switch them to bypass mode.

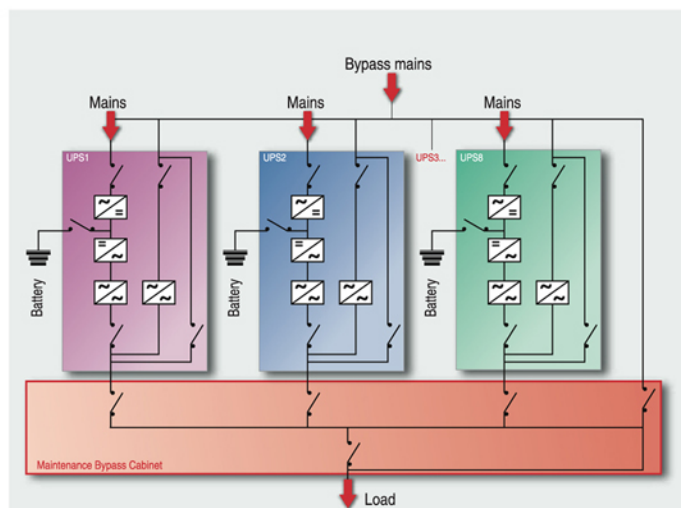
This guarantees maximum load protection, even during maintenance and enlargement.

Maximum levels of availability also in the event of an interruption to the parallel bus cable: the system is "FAULT TOLERANT". It is not affected by faults with the connection cables and continues to power the load without a continuity solution, signalling the anomaly with an alarm.

High Efficiency Parallel System (HEPS) : this is the system which optimises the efficiency of the system in parallel, according to the power required by the load at that moment. The N+1 redundancy is nevertheless guaranteed, but each UPS operating in parallel operates at the best possible load level in order to achieve the highest overall efficiency.

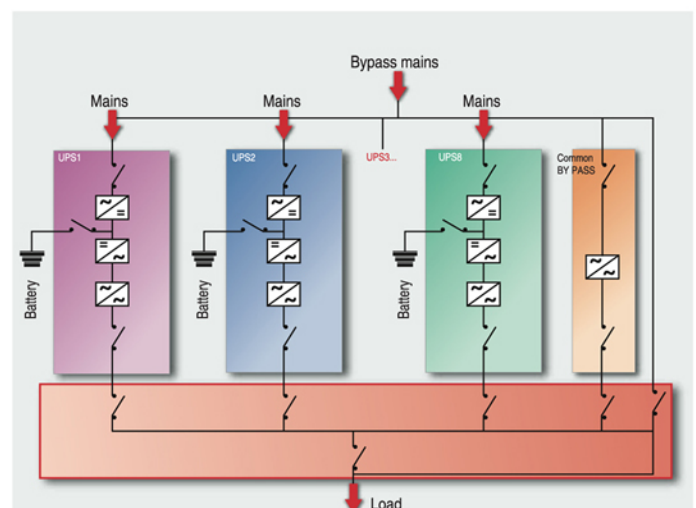
OPTIONS

- **UGS - UPS Group Synchroniser**
Allows 2 or more UPS not in parallel to remain synchronised even during a power failure.
The UGS also enables a sorotec UPS to be synchronised with an independent power source, even of a different power rating.
- **PSJ - Parallel Systems Joiner**
Connects two UPS groups operating in parallel configurations through a power coupling switch.
The Slave UPS Group is permanently synchronised to the Master group. Should one of the UPS in one of the parallel groups fail, the PSJ will automatically connect the remaining UPS to the other group via an external bypass.



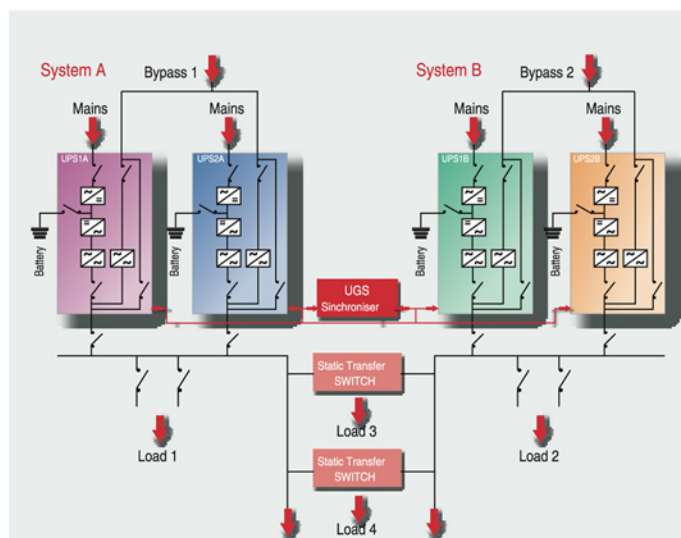
Parallel configuration of up to 8 units with distributed bypass

Parallel architecture which guarantees the redundancy of the power source. + **Flexibility and modularity**



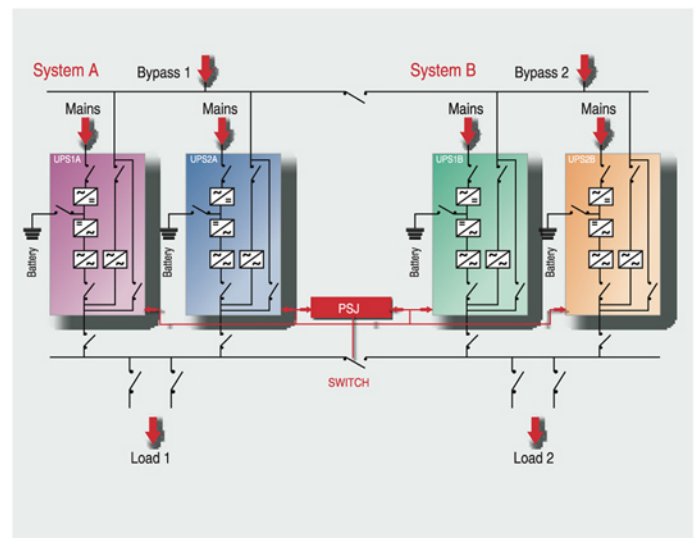
Parallel configuration of up to 8 units with common bypass

Parallel architecture which guarantees the redundancy of the power source, with autonomous bypass management. + **Selectivity downstream faults in bypass mode**



Dynamic dual bus configuration

Solution which ensures redundancy until the distribution of the power supply to the loads + **Downstream fault discrimination**

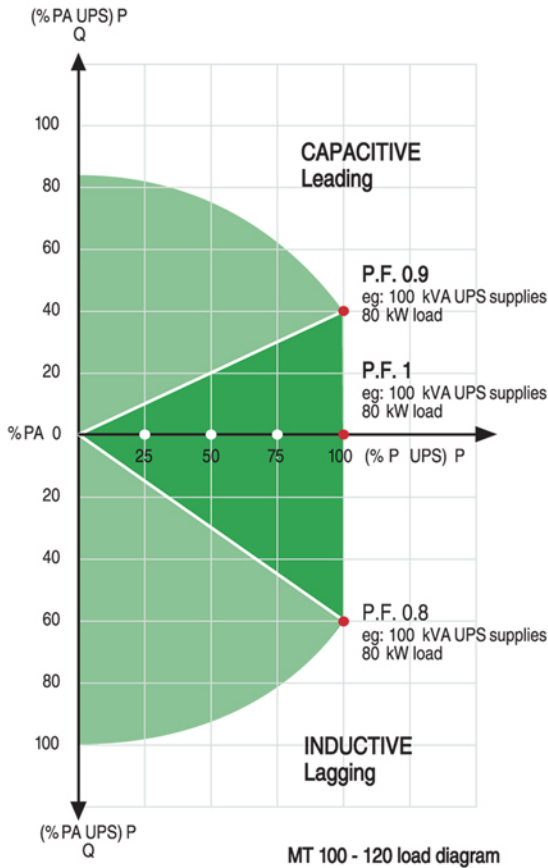


Dual bus system configuration

Solution which guarantees the redundancy of the power supply even during maintenance + **High levels of availability and redundancy**

FLEXIBILITY

GP9332C is suitable for a wide range of applications including IT and the most demanding industrial environments. The UPS is suitable for power capacitive loads such as blade servers, without any reduction in active power, from 0.9 leading to 0.8 lagging. With a broad range of accessories and options, complex configurations and system architectures can be achieved to guarantee maximum power availability and the option to add new UPS without interruption to existing users. Using Arakawa UPS Group Synchroniser (UGS) and Parallel Systems Joiner (PSJ) sophisticated inter group parallel and redundant systems can be achieved to provide the highest possible levels of resilience and availability.



BATTERY CARE SYSTEM: MAXIMUM LIFETIME POTENTIAL

The GP9332C Battery Care System consists of a range of features designed to provide optimum performance and enhanced operating life:

- Dual level charging regime to optimise recharge currents and lower recharge times
- Temperature compensation and deep discharge protection to reduce overall battery aging
- Charge blocking system to reduce electrolyte consumption and lengthen the life of VRLA batteries
- Predictive battery testing to spot potential battery deterioration and failure

GP9332C is also compatible with different battery technologies: open-vented lead acid and AGM and Gel VRLA, NiCd.

ADVANCED COMMUNICATION

- Compatible with TeleNetGuard for remote maintenance
- Advanced, multi-platform communication for all operating systems and network environments: PowerShield® monitoring and shut-down software included, for windows 2008, Vista, 2003, XP; Mac OS X, linux, Novell and most popular Unix operating systems. The UPS is supplied with a cable for direct connection to the PC (Plug and Play)
- Double RS232 serial port
- Installation slot for an Emergency Power Off (EPO) interface to allow the UPS to be switched off remotely in an emergency.
- Generator interface: enables desynchronisation of the UPS output from a generator supply which may be subject to phase and frequency variations. The interface also enables more economic use of the battery charger.

GP9332C 10KVA-40KVA Can put batteries inside



Dimensions (mm)

GP9332C 10-40KVA



GP9332C 60-80KVA



GP9332C 100-120KVA



MODELS	GP9332C 10KVA	GP9332C 15KVA	GP9332C 20KVA	GP9332C 30KVA	GP9332C 40KVA	GP9332C 60KVA	GP9332C 80KVA	GP9332C 100KVA	GP9332C 120KVA
POWER (kVA)	10	15	20	30	40	60	80	100	120
INPUT									
Nominal voltage	380 - 400 - 415 Vac three-phase								
Voltage tolerance	400 V + 20% /- 25%								
Frequency	45 ÷ 65 Hz								
Soft start	0 ÷ 100% in 30" (selectable)								
Permitted frequency tolerance	± 2% (selectable from ± 1% to ± 5% from the front panel)								
Standard features	Back Feed protection; separable bypass line								
BATTERIES									
Type	lead, flooded and VRLA AGM /GEL; NiCd								
AC ripple	< 1%								
Temperature compensation	-0.5 Vx°C								
Typical charging current	0.2 x C10								
OUTPUT									
Rated power (kVA)	10	15	20	30	40	60	80	100	120
Active power (kw)	8	12	16	24	32	48	64	80	96
Number of phases	3 + N								
Nominal voltage	380 - 400 - 415 Vac three-phase + N								
Static stability	± 1%								
Dynamic stability	± 5% in 10 ms								
Voltage distortion	< 1% with linear load / < 3% with no-linear load								
Crest factor (Ipeak/Irms)	3:1								
Frequency stability on battery mode	0.05%								
Frequency	50 or 60 Hz (selectable)								
Overload	110% for 60'; 125% for 10'; 150% for 1'								
ENVIRONMENTAL									
Weight (kg) without batteries	210 *	220 *	230	280	330	450	600	640	650
Dimensions (hwd) (mm)	1400 x 555 x 740					1400 x 800 x 740			
Remote signalling	Voltage-free contacts								
Remote commands	EPO and bypass								
Communication	double RS232 + remote contacts + 2 communication interface slots								
Operating temperature	0°C / +40°C								
Relative humidity	< 95% non condensing								
Colour	light grey RAL 7035								
Noise	54		60		62			63÷68 dBA at 1 m	
Protection rating	IP20								
Efficiency Smart Mode	Up to 98%								
Compliance	European Directives: LV 2006/95/CE; EMC 2004/108/EC; Safety IEC EN 62040-1; EMC IEC EN 62040-2 C2								
Classification according to IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111								

* Also available with internal batteries

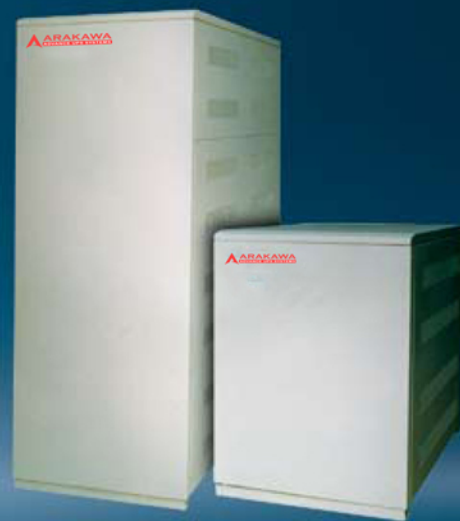
N.B.: Consult us for the availability



BT7000 and BT9000 are for small capacity battery, like 7Ah, 9Ah
BC1000 is for big capacity battery, like 38Ah, 65Ah, 100Ah and so on



BT7000 and BT9000 series



BC1000 series

BT7000 BT9000 BC1000

Battery Cabinet

UPS Battery Cabinet



TECHNICAL SPECIFICATIONS

Name	Model No.	Battery	Weight(kGS)	Packing measure(LxWxH)mm
Battery Cabinet	BC1001	100Ah 1PC	5	480x220x330
	BC1002	100Ah 2PCS	8	480x390x280
	BC1003	100Ah 3PCS	13	600x450x210
	BC1004	100Ah 4PCS	17	640x490x210
	BC1006	100Ah 6PCS	21	640x490x210
	BC1008	100Ah 8PCS	24	800x490x210
	BC1010	100Ah 10PCS	30	980x490x200
	BC1012	100Ah 12PCS	34	800x490x330
	BC1016	100Ah 16PCS	45	800x490x220 1180x490x90
	BC1020	100Ah 20PCS	53	980x490x230 1180x490x90

Name	Model No.	Battery	Weight(kGS)	Packing measure(LxWxH)mm
Battery Cabinet	BT7032	7Ah 6PCS	18	240x495x335
	BT7082	7Ah 16PCS	45	330x590x475
	BT7202	7Ah 40PCS	120.5	445x710x930
	BT9032	9Ah 6PCS	18.5	240x495x335
	BT9082	9Ah 16PCS	46	330x590x475
	BT9201	9Ah 20PCS	77.5	445x710x930
	BT9202	9Ah 40PCS	122.5	445x710x930

Notes:

The package is one package for one set of battery group.

The space of 100Ah battery cabinet 1 nos is equal to 24Ah 3 nos, 38Ah battery 2 nos and 65Ah battery 1 nos.

