





The British Power Conversion Company

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Company Profile & History

Founded in 1996 The British Power Conversion Company based in Romsey, Hampshire is an independently owned international corporation, offering an established and effective range of power protection products and services selling to a broad spectrum of industries and sectors.

The recent restructuring of BPC has allowed BPC EMEA Ltd (Europe, Middle East and Africa) to take a specific role in the group's rapidly expanding international business. Actual Power Ltd, acquired by BPC in 1997, has specialised in project based business and will now be dedicated to the sales and service of BPC products in the UK market.

BPC manufacture and distribute a wide range of UPS and related power protection products aimed at the Computer Networking, Telecom, Midrange Computer, Emergency Lighting and Three Phase sectors of the market. BPC is at the forefront of modern power protection technology with expertise in the design development and manufacture of special and custom battery systems enabling it to meet the diverse needs of the computing, leisure, industrial, commercial, emergency services, medical, lighting, military and government markets. As well as an extensive standard UPS and Battery range BPC also offer a variety of additional products such as frequency and voltage converters, static inverters, rectifiers and generators.

At BPC we not only pride ourselves on competitive prices and the quality of our products but we have a comprehensive Service Department offering a full range of services from Site and Power Surveys, Commissioning and Battery Builds to Service Contracts and Maintenance Visits. We provide a dedicated customer service to the UK and International markets and, combined with our complete range of UPS and Power Protection Products, we have a solution for every application.





Product Development

The cycle time for the development of new models of UPS is rapidly shortening as manufacturers take advantage of the latest advances in microprocessor and power semiconductor devices developed by the world's component suppliers. These advances mean that our products are becoming lighter, smaller and increasingly intelligent with a dramatic affect on cost reduction allowing BPC to provide even more commercially viable solutions. Our UPS systems are all designed with ease of use in mind from the sub 3kVA ranges with their 'plug and play' capability up to the largest of our three phase systems.

For more mission-critical applications like network fileservers and Enterprise computer systems BPC offer a range of equipment up to 800kVA suitable for office environments, large mainframe computers or rugged industrial applications.

Manufacturing & Design

Today, the BPC range of UPS includes more than 60 different models. From the smallest to the largest units, the manufacturing process is rigorously monitored to ensure the highest levels of reliability, quality and safety are achieved, in accordance with key International Standards. Again BPC makes widespread use of the very latest technologies throughout our product portfolio, for example the extensive range of modular systems which are both scalable and offer parallel redundant capability making the systems even more dependable and flexible.

Service & Support

At BPC we have some of the most able and talented power protection engineers in the business. Our commitment is to achieve the highest levels of customer satisfaction by providing real solutions that work reliably and meet your specific needs. This commitment to customer care does not stop here, all BPC products are backed by a superb after sales service providing comprehensive emergency breakdown and spares support.

BPC's devotion to excellence is reflected in the enduring quality of its products and is matched by an equally lasting commitment to customer care.



UPS technology of the future – tomorrow's technology, today

BPC Group

The British Power Conversion Company has a global presence with its headquarters based in the South of the United Kingdom. BPC also maintains a local presence in many countries through a network of approved distributors dedicated to promoting the BPC product range, providing reliable and cost effective solutions and services to protect critical systems from the effects of power related problems and interruptions.

BPC EMEA Limited (Group Headquarters)

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BPC products are CE approved



ISO 9001–2008 For design, assembly, commissioning, testing and servicing



Verification of Manufacturers Testing in accordance with IEC 62040-1-1/2





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Page 38	Software	PowerSmart, WinPower, Viewpower and T-Mon

PowerSurge

Surge Protection Products

The PowerSurge single outlet surge suppression wall plug – multiple outlet surge suppression 5 & 7 socket strips come with upgraded features, new streamline design and offers a full range of surge solutions to cover your electronic equipment in the home or small office.



BPC

Features:

- Power rating 13A 240VAC
- Illuminated LED indicates that the surge protection is functioning properly
- EMI/RFI noise filter to eliminate the AC line noises
- Ultra rapid response time
- Contacts protected by safety switches
- Heavy duty 1.8m power cord for the 5&7 outlet strip types



Single Output Surge Protection Designed for space restricted areas and when extension power cables are not required. The PowerSurge wall plug fits into any mains output socket and provides 714 joules energy rating protection for your basic electronic devices, household electronics, kitchen appliances and more.

The PowerSurge 5 socket strip comes with a 1.8m heavy duty power cord and is designed to protect multiple pieces of equipment. The PowerSurge 5 socket strip fits into any mains output socket and provides 714 joules energy rating protection for your standard electronic devices, household electronics, kitchen appliances and more.





The PowerSurge 7 socket strip comes with a 1.8m heavy duty power cord and is designed to protect multiple pieces of equipment. The strip also includes an input and output RJ11 / UK phone jack socket to provide tel/fax/modem line protection.

The PowerSurge 7 socket strip fits into any mains output socket and provides 714 joules energy rating protection for your basic electronic devices, household electronics, kitchen appliances and more.



PowerStarXtreme - Line Interactive UPS

The Total Computer Power Protection for Extreme wide voltage environmental conditions



Features:

- Suitable for extreme site conditions
- Compact design
- Excellent microprocessor control guarantees high reliability
- Double boost and buck AVR for voltage stabilisation
- Intelligent battery management
- Output short circuit protection
- Overload protection
- Auto restart when AC is restored
- Simulated sine wave
- Off-mode charging
- Cold start function
- Optional USB / RS-232 communication port and RJ-11 phone protection

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International manufacturing standard	Smart Communication Interface	Nil	RS 232 port	RS 232 port				
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Net Weight (kgs) 4.25 8.9 Environment Humidity 0.90% RH @ 0-40°C (non-condensing) Noise level Less than 4odB Management	International manufacturing standard		EN 60950					
Environment Humidity 0-90% RH @ 0-40°C (non-condensing) Noise level Less than 4odB Management	Dimensions (w x d x h) mm	100 x 28	7 x 142	146 x 350 x 160				
Humidity 0-90% RH @ 0-40°C (non-condensing) Noise level Less than 4odB Management	Net Weight (kgs)	4.2	5	8.9				
Noise level Less than 4odB Management	Environment							
Management	Humidity		0-90% RH @ 0-40°C (non-condensing)					
	Noise level		Less than 4odB					
PowerSmart Extreme Intelligent Power Management Supports Windows 98 SE/ME/NT 4.x/2000/2003/XP/Vista/2008	Management							
	PowerSmart Extreme Intelligent Power Management	Support	s Windows 98 SE/ME/NT 4.x/2000/2003/XP/Vist	a/2008				

PowerStar — Line Interactive UPS

Total Computer Power Protection & Management Solution for Computers



Features:

- Compact size and elegant styling with high reliability
- Microprocessor controlled technology
- Built-in RS232 communication port
- DC start function
- Auto restart
- USB option
- Software & cables included
- Compatible with Windows 98/ME, Windows XP/2000/2003, Windows NT 4.0 with sp6 or sp6a, Linux x86, HP-UX 11.x and 11i.x, IBM AIX 4.3 and 5.x, SUN solaris/x86 2.6/7/8/9, SUN solaris/Sparc 2.6/7/8/9, Compaq True64, UnixWare IA 32, FreeBSD 4.x, MAC OS X 10.x

Model	PSTAR 400 PSTAR 600 PSTAR 800							
Power Rating (VA)	400 600 800							
Power Rating (Watts)	240 360 480							
Typical Backup Time (mins)	12	19	24					
Auto-Shutdown Capacity	Yes	Yes	Yes					
Output Sockets (IEC320)	3	3	3					
Dimensions (w x d x h) mm		100 x 330 x 140						
Technical specification								
Nominal Input Voltage (V)		230						
Input Voltage Tolerance	+/- 26%							
Input Frequency Auto-Switching (Hz)		50/60 +/- 5%						
Output Voltage on Battery (V)		230 +/- 10%						
Output Frequency on Battery (Hz)		50/60 + /- 1%						
Voltage Regulation (V)		AVR						
Typical Recharge Time to 90%		8 hours						
Protection & Diagnostics								
Surge Protection		IEEE 587 Cat. A&B						
Noise Filtering		Full EMI/RFI suppression						
Over & Under Voltage Protection		Auto "buck & boost"						
Overload & Short Circuit Protection		Smart technology						
Low Battery Protection		Two stage with battery cut-off						
Warning Diagnostics / Alarms		RS232 or contacts						

PowerStar — Line Interactive UPS

BPC

The British Power Conversion Company

Total Power Protection & Management Solution for Computers



Features:

- Microprocessor based design
- Fully intelligent line interactive
- Extra wide automatic voltage regulation
- Visual diagnostics for battery level & special status
- Surge suppression for data / telephone
- Double protection for overload / short circuit
- All in one button for self-test, alarm-reset, & DC start
- Smart RS232 communication port
- Compatible with Windows 95/98/2000/NT/ME, Linux, SCO UNIX & DOS

Model		PSTAR 1700	PSTAR 2200	PSTAR 3000	PSTAR 800TE
Power Rating VA/Watts	1200/700	1700/1050	2200/1400	3000/2000	800/480
Input					
Voltage Frequency		Selectable	200/220/230/240V 50Hz / 60Hz	auto detect	
Current 230V	6A	8A	10A	14A	5A
Output					
Voltage		Rated volta	ge +/- 6% for back-up mode, or <+/-	10% for AVR	
Frequency		50Hz or 60Hz +	-/- 0.1Hz (selectable under DC start)		50Hz
Waveform			Simulated pseudo sine wave		
Current 230V	5.5A	7.8A	10A	13.6A	4A
Battery					
Transfer Time			4 ms typical		
Voltage / Capacity	12V 7AH x2pcs	12V 7AH x3pcs	12V 7AH x4pcs	12V 7AH x6pcs	12V 7AH x4pcs
Typical Back-up Time			10 mins		*see below
Recharge Time			90% within 5 hours		
LED / Alarm indication					
Normal / In Charge			Green, LED no beep		
Back-up / Abnormal Input Voltage			Orange, LED flashing, 2 beeps/sec		
Abnormal Input Frequency (back-up)			Orange, LED rapid flashing, no beep	p	
Low Battery			Orange, LED flashing, 4 beeps/sec		
Battery Replacement			Red, LED flashing, 8 beeps/sec		
Overload/Fault			Red, flashing, continuous beep		
General					
Indication of Special Status		Replaceme	ent battery / alarm off / charging / b	uck / boost	
DC Start / Alarm Reset			Yes		
Battery Level Indication			Yes		
Environment Temperature			0-40°C		
Environment Humidity			30 – 95% non-condensing		
Dimensions (w x d x h) mm	180 x 380 x 200	180 x 450 x 200	180 x 450 x 200	180 x 510 x 200	180 x 440 x 200
Weight (net / gross) kgs	15 / 16	21.5 / 22.5	25 / 26	31 / 32	25 / 26

^{*} approx. 50 Watts = 4 hours / <100 Watts = 2 hours / <150 Watts = 1 hour / <300 Watts = 30 min.



PowerPrem Series

Line Interactive UPS

Premium Power Protection

Features:

- True Sine Wave output
- Microprocessor based design
- Fully intelligent line interactive
- User friendly configurable
- Smart battery management
- Overload protection
- RJ-11 data line protection
- Easy battery replacement
- RJ-45 network protection
- Extended input range (optional)



Model		PPREM1100	PPREM1400	PPREM1100	PPREM1400	PPREM2200	PPREM3000
		Tov	Tower Rackmount				unt Convertible
Power Rating VA / Watts		1100/687.5	1400/875	1100/687.5	1400/875	2200/1375	3000/1875
Input							
Nominal Voltage				230	OVac		
Voltage Regulation				+/- 25% (+/- 20% or	+/- 30% configurable)		
Frequency Range				50 / 60Hz +,	/- 5Hz (Auto)		
Output							
Nominal Voltage				230	OVac		
Voltage Regulation				+10% ~ -15% (AC mode	e) +/- 3% (battery mode)		
Frequency Stability				50 / 60 H	z +/- 0.5%		
Overload Capacity					ec. >140% for 10 cycles		
Transfer Time				<4ms	typical		
Battery							
Туре				Sealed lead acid	maintenance free		
DC Voltage		24	Vdc	24	Vdc	48'	Vdc
Typical Back-up Time					epending on load		
Typical Recharge Time to 909	%				ours		
Easy Access Replacement				Y	es		
General							
Power Line Surge Suppression	on	741 J	oules	741 J	Joules	694 Joules	900 Joules
Tel/Fax Surge Suppression	Joules	114 J	oules	114 J	Ioules	114 J	oules
	Туре			RJ11 (one	e pair), 2C		
Networking Surge	Performance			Up to 10	00 Base-T		
Suppression	Туре			RJ11 (one	e pair), 2C		
Indicators LEDs	Front panel		Line normal, battery b	oackup, boost, buck, battery r	replacement, fault, overload, l	oad / battery capacity	
	Rear panel			Site wir	ing fault		
	Audio alarms		Battery b	oackup, battery backup over 3	go minutes, battery low, overl	oad, fault	
Communication	Intelligent Interface		True RS2	32 & contact closure signal (s	standard), SNMP / HTTP card	(optional)	
Environment	Ambient Operation		3000	m max. elevation 10 ~ 95% h	numidity, non-condensing, 0 ~	40°C	
	Audio Noise			<45dBa (at 1	1m distance)		
Weight (net weight) kgs		14.5	19.1	21.8	23.7	39.2	42.4
Dimensions (w x d x h) mm		150x370x210	150x450x210		450x90	430x4	



PowerPrem Series

The British Power Conversion Company

Line Interactive UPS Premium Power Protection



Features:

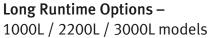
- True Sine Wave output
- Microprocessor based design
- Fully intelligent line interactive
- User friendly configurable
- Smart battery management
- Overload protection
- RJ-11 data line protection
- Easy battery replacement
- RJ-45 network protection

Extended input range (optional)

Technical Specification

Model	PPREM 5000
	Tower / Rackmount Convertible
Power Rating VA / Watts	5000 / 3500
Waveform	Pure sine wave
Nominal Voltage	220 / 230 / 240 VAC by DIP switch setting
Transfer Time	<4ms typical
Line Mode Voltage	Nom. range (no load): 220 / 230 / 240VAC +5% Battery mode voltage regulation: 220 / 230 / 240VAC +3%
Output Frequency (battery mode)	50/60Hz +0.1Hz
Efficiency	Line mode: >97% / boost buck mode: >93% / battery mode (R load): >80%
Short Circuit Protection	Line mode – circuit protection / battery mode – current limit with fuse
Battery Type / Rating	Sealed lead acid maintenance free / 12V 7AH x 12pcs
Dimensions (w x d x h) mm	180 x 500 x 435
Weight (kgs)	80kgs (including batteries)

PowerPrem





The PowerPrem Long runtime range of Line Interactive True Sine Wave UPS is a cost effective design ideal for Network Server protection and telecommunication applications that need longer autonomy.

The true Sine Wave output of the inverter makes this UPS a much better choice for long runtime applications, ensuring that when the equipment load is on extended battery operation the quality performance of the UPS output maintains optimum efficiency/compatibility and critical reliability of the application.

With the advances in information technology, an increasing number of servers or devices such as modems, hubs and routers are susceptible to surges and spikes from power problems coming through the telephone line or LAN line; therefore, the PowerPrem UPS also has added surge and spike protection for RJ11 and RJ45 connections.



PowerGem Pro Tower Series

Online Double Conversion UPS

Ultimate Power Protection for Mission Critical Applications

Features:

- True double conversion
- · Advanced digital signal processor control technology
- Wide input voltage and frequency windows
- LCD mimic panel
- Near unity power factor
- Output power factor 0.8
- ECO mode operation for energy saving
- Extended runtime capability
- Emergency shutdown control through EPS
- Smart battery charger
- Customer options slot
- Communication software provided
- N+X parallel redundancy 6K and above
- Programmable power management outlets



 ${\sf UPS\ status, load\ level, battery\ level, input/output\ voltage,\ discharge\ timer,\ and\ fault\ conditions}$

 $$0\text{-}40^{\circ}\text{C}$$ 90% RH maximum, non-condensing

Selectable USB / RS232 Interface
Relay contact board, SNMP / WEB card, etc.

₹55dBa

250 x 592 x 576

Technical Specification

Model	PGPRO 1000	PGPRO 2000	PGPRO 3000	PGPRO 6000	PGPRO 10000		
Power Rating (VA/Watts)	1000/800	2000/1600	3000/2400	6000/4800	10,000/8000		
Input							
Voltage (Vac)		120/140/160 ~ 300 VAC		160-300 VAC	160-300 VAC/277-485 VAC		
Frequency		40-70Hz		46-64	4Hz		
Phase		Single phase with ground		Single phase + ground + neutral	Single, line + neutral + ground; three, R,S,T + neutral + ground		
Input Power Factor		0.95 @ 100% full load		up to 0.99 @ 1	00% full load		
Output							
Voltage			230 VAC				
Voltage Regulation		+/- 3%		+/- 1	1%		
Power Factor	0.8						
Wave Form		Sine wave, THD <3%		Sine wave,	THD <3%		
Frequency Stability – unless synchronised to line		50H:	+/- 0.1% unless synchronise	d to line			
Frequency Regulation			50Hz +/- 0.3%				
Transfer Time			0 ms				
Crest Factor			3:1				
Efficiency (AC to AC)>85%	>88%	>88	8%	>89	%		
DC Start			Yes				
Batteries							
Туре		9	sealed lead acid maintenance	free			
Capacity	12V 7AH x 3 pcs	12V 7AH x 6 pcs	12V 9AH x 6 pcs	12V 7AH x 20 pcs	12V 9AH x 3 pcs		
Voltage (Vdc)	36	7	2	24	0		
Typical Recharge Time to 90%		3 hours		4 hours	5 hours		
Built-in Charger (max. Charging Current)			1.0A				

<45dBa

190 x 421 x 318

28.1

145 x 397 x 88

13.18

Audible and Visual Alarms

Acoustic Noise at 1m distance

Net Weight (kgs) including batteries

Operating Temperature

Communication Options

Interface Type



PowerGem Pro Rackmount



The British Power Conversion Company

Series Online Double Conversion UPS

Ultimate Power Protection for Mission Critical Applications

Features:

- True double conversion
- Advanced digital signal processor control technology
- Wide input voltage and frequency windows
- LCD mimic panel
- Near unity power factor
- Output power factor 0.8
- ECO mode operation for energy saving

- Extended runtime capability
- Emergency shutdown control through EPS
- Smart battery charger
- Customer options slot
- Communication software provided
- N+X parallel redundancy 6K and above
- Programmable power management outlets



Model	PGPRO 1000R	PGPRO 2000R	PGPRO 3000R	PGPRO 6000R PGPRO 10000R					
Power Rating (VA/Watts)	1000/800	2000/1600	6000/4800	10,000/8000					
Input									
Voltage (Vac)		120/140/160 ~ 300 VAC		160-300 VAC	160-300 VAC/277-485 V				
Frequency		40-70Hz		46-64	Hz				
Phase		Single phase with ground		Single phase + ground + neutral	Single, line + neutral - ground; three, R,S,T + neutral + ground				
Input Power Factor		0.95 @ 100% full load		up to 0.99 @ 10	00% full load				
Output									
Voltage			230 VAC						
/oltage Regulation		+/- 2%		+/- 1	%				
Power Factor			0.8						
Nave Form		Sine wave, THD <3%		Sine wave,	THD <2%				
Frequency Stability		50Hz +0.2% (free running)							
Frequency Regulation		50Hz or +/- 0.3%							
Transfer Time			0 ms						
Crest Factor			3:1						
Efficiency (AC to AC)	>85%	>8	8%	>89%					
DC Start			Yes						
Batteries									
Туре			Sealed lead acid maintenance fre	ee					
Capacity	12V 7AH x 3 pcs	12V 7AH x 6 pcs	12V 9AH x 6 pcs	12V 7AH x 20 pcs	12V 9AH x 203 pcs				
/oltage (Vdc)	36	7	72	240)				
Recharge Time		3 hours		4 hours	5 hours				
Built-in Charger (max. charging current)			1.0A						
General									
Audible and Visual Alarms		UPS status, load leve	el, battery level, input/output volt	age, discharge timer, and fault cond	litions				
Operating Temperature			0-40°C						
Humidity		90% RH maximum, non-condensing							
Acoustic Noise at 1m distance		<45dBa		<55d	Ва				
Interface Type			Selectable USB/ RS232 Interface	e					
Communication Options		Rela	y contact board, SNMP / WEB ca	rd etc					
Dimensions (w x d x h) mm	438 x 420 x 88	438 x 5	80 x 133	438 x 580	0 x 222				
Net Weight (kgs)	16	3	31	82	85				



PowerTower Series

Single Phase & Three Phase Online Double Conversion UPS

Advanced Modular Redundant Power Protection







Features:

- Available in 3.5kVA & 5kVA power modules
- Scalable upgrades up to 12 power modules
- Can configure for N+X parallel redundancy
- Compact and light design
- Online double conversion
- Digital signal processor
- True Sine Wave output
- Possible 3/3, 3/1, 1/3 or 1/1 user configurations
- Complete modular design
- LCD display control panel
- Multiple communication ports
- Additional external battery packs

PowerTower 10kVA, 20kVA, 60kVA & Battery Cabinet

Model			PT30K	PT45K	PT60K
Power Rating kVA/kW	10/8	20/16	30/24	45/36	60/48
Number of Modules	3	6	9	9	12
Nominal Input Voltage			230 VAC or 400 VAC, +15%-20%		
Input Frequency Range			50 / 60Hz auto sensing		
Input Power Factor			>0.99 (full load)		
Input Current THD			<3%		
Output Voltage Regulation			230 / 400 VAC +/- 1%		
Output Frequency Stability			+/-0.5 %Hz (free running)		
Output Waveform			Pure sine wave THD <3%		
Input / Output Connection			Hardwired		
Audible Noise at 1m Distance			42-46 dbA		
Crest Factor			3.5:1		
Overload Protection		125	% for 2 minutes / 150% for 30 seco	onds	
Battery		Exte	ernal sealed lead acid maintenance	free	
Battery Voltage			240 VDC		
Typical Recharge Time to 90%			8 hours		

General									
Typical Runtime (mins)		10 minutes standard autonomy with options for long runtimes							
Transfer Time			No break – zero ms						
Surge Protection		EN61000-4-5							
Noise Suppression			EN50091-2						
Intelligent Battery Monitoring			Auto Sensing						
Warning Diagnostic / Alarms			Comprehensive audio & visual						
Communication (DB9 Port)			True RS232 and contacts						
Weight (kgs)	110	110 130 154 165 194							
Dimensions (mm) w x d x h	414 x 62	8 x 1345	2 x 414 x 628 x 1345 2 x 414 x 628 x 1645						



PowerPro CL 300 Range



The British Power Conversion Company

Three Phase Input & Output Online Transformerless UPS

CleanLine Performance



Features:

- High input power factor
- Low input current THD
- High efficiency up to 93%
- Cold Start
- Static and maintenance bypass
- Overload and short circuit protection
- Emergency stop utility, built-in
- 128 recorded event history
- Parallel options up to 4 units
- Calendar and time indicator
- Advanced automatic and manual battery test system
- Temperature compensated battery charging
- Dial up modem direct connection and AT command set built-in
- RS232 and dry contacts for communication and remote monitoring
- Input / output customisation optional
- SNMP compatible communication

Model	CL310	CL315	CL320	CL330	CL340	CL360	CL380	CL3100	CL3120	CL3160	CL3200	CL3250
Power Rating kVA/kW	10/8	15/12	20/16	30/24	40/32	60/48	80/64	100/80	120/96	160/128	200/160	250/20
Input												
Nominal Voltage					230	/400 VAC 3 Pha	ase, 4 wire, +/-	20%				
Bypass Voltage					230	/400 VAC 3 Pha	ase, 4 wire, +/-	20%				
Power Factor						>0.	.98					
Input Frequency						50Hz / 60	Hz +/- 5%					
Input THDi						<5	%					
EMI						EN50091	-2 Class A					
Output												
Power Factor						(0.8					
Voltage					23	0/400 VAC 3 PI	nase, 4 Wire, +	/-1%				
Frequency						50Hz	/ 60Hz					
Frequency Tolerance					+/-2% (liı	ne synchronise	d) / +/-0.2% (fr	ree running)				
Efficiency at 100% Load						>9	91%					
Crest Factor						3	3.1					
Overload Protection				100%	- 125% load: 1	0min, 125% - 1	150% load: 1m	in, >150% load:	bypass			
Short Circuit Protection					E	lectronic short	circuit protect	ion				
Total Harmonic Distortion						<	3%					
Batteries												
Туре					Se	aled Lead Acid	– Maintenance	Free				
Number of Batteries						2 x 30	batteries					
Float Charging Voltage						2x 40	05 VDC					
End of Discharge Voltage						2x 30	OO VDC					
Battery Cabinet			Internal					Exte	rnal battery ca	binet		
Ambient Temperature						2	5° C					
Battery Protection						Automatic o	ircuit breaker					
Battery Test						Standard (ev	ery 72 hours)					
General												
Software					T-mon UPS	management s	oftware (3 clie	nts standard)				
Communication						Dry conta	cts & RS232					
Temperature Range						0° C	- 40° C					
Relative Humidity & Altitude					90% max. (non-condensin	g) / <1000m ab	ove sea level				
Protection Degree & Acoustic Noise						IP20 / <50dBa	(at 1m distance	2)				
Dimensions w x d x h (mm)	375 x 725 x 1030 495 x 835 x 1445 780 x 890 x 1900											
Weight (Kgs)	96	105	110	183	196	225	350	350	375	425	435	450
Options												
Transformer					Galvanic is	olation transfo	rmer at the inp	out or output				
Parallel Operation					1+3 Systems (N	l+1 redundant.	redundant, svr	mmetric paralle	(l)			



PowerPro HP 100 Series

Single Phase Input & Output Online Double Conversion UPS

High Performance Advanced Power Protection



Features:

- True double conversion technology
- Galvanic isolation transformer at the inverter stage
- High reliability with low maintenance
- Pure sine wave output
- High efficiency up to 90%
- Intelligent battery monitoring to maximise service life
- Automatic static bypass switch providing no-break transfer
- Capability for parallel redundant operation if required
- LCD panel providing real time operational status
- Recorded power history logs
- RS232 and dry contacts for communication and remote monitoring
- Input / output customisation is available

Picture shows HP105XA and HP107XA models

Model	HP105XA	HP106	HP107XA	HP110	HP115	HP120	HP130		
Power Rating kVA/kW	5 / 3.25	6 / 4.2	7 / 4.55	10 / 7	15 / 10.5	20 / 14	30 / 21		
Input									
Voltage / Tolerance			230	VAC Single Phase / +/-:	15%				
Bypass Voltage / Tolerance				230Vac +/- 10%					
Maximum Current absorbed from mains	30A	30A 31A 40A 48A 70A 96A							
Input Frequency / Tolerance				50Hz +/- 5%					
EMI		EN50091-2 Class A							
Output									
Waveform / Output THD		True sine wave / <3% THD							
Nominal Voltage				230Vac					
Voltage Stability		+/- 1%							
Voltage Dynamic Step Load (o to 100% to o)		+/-5%							
Frequency / Frequency Stability		50Hz Line synchronised +/- 1% / Free running +/- 0.2%							
On Line Mode Efficiency at full load		>88%							
Economy Mode Efficiency at full load		>98%							
Crest Factor		3:1							
Over Load Protection		up to 125% load for 10mins / up to 150% load for 1 min							
Short Circuit Protection		Electronic short circuit protection							
Batteries									
Туре			Sealed	l Lead Acid – Maintenan	ce Free				
Number of 12V Blocks	16	20	13	20	20	26	26		
Float Charging Voltage	216 Vdc	270Vdc	243'Vdc	270Vdc	270Vdc	351Vdc	351Vdc		
End of Discharge Voltage	160Vdc	200Vdc	180 [°] Vdc	200Vdc	200Vdc	260Vdc	260Vdc		
Equalising Boost Charge Voltage				N/A					
Battery Location		Internal				External			
Battery Test				Optional					
General									
Protection Degree				IP21					
Communication			Dry contacts plu	us RS232 / Options for S	NMP & Modbus				
Software			T-	Mon supplied as standa	rd				
Temperature/Relative Humidity/Altitude			0°C to 40° C / 90% ma	x (non-condensing) / <1	000m (above sea level)				
Acoustic Noise at 1m Distance				<45 dbA					
Heat Dissipation at Nominal Load (kW)	0.54	0.63	0.78	1.04	1.57	2.09	3.14		
Dimensions (mm) w x d x h	265x600x585	265x740x710	265x665x635	265x740x710	265x740x710	485x675x1145	485x675x11		
Weight without Batteries (kgs)	60	74	75	91	112	250	300		



PowerPro HP 200 Series

Three Phase Input & Single Phase Output Online Double Conversion UPS

High Performance Advanced Power Protection



The British Power Conversion Company



Features:

- True double conversion technology
- Galvanic isolation transformer at the inverter stage
- High reliability with low maintenance
- Pure sine wave output
- High efficiency up to 90%
- Intelligent battery monitoring to maximise service life
- Automatic static bypass switch providing no-break transfer
- Capability for parallel redundant operation if required
- LCD panel providing real time operational status
- Recorded power history logs
- RS232 and dry contacts for communication and remote monitoring
- Input / output customisation is available

Picture shows HP206 and HP210 models

Technical Specification

Dimensions (mm) w x d x h

Weight without Batteries (kgs)

Model		HP207	HP210	HP215XA	HP220XA	HP230XA			
Power Rating kVA/kW	6 / 4.2	7 / 4.9	10 / 7	15 / 10.5	20 / 14	30 / 21			
input									
/oltage / Tolerance			230/400VAC Three P	hase +N / +/- 15%					
Bypass Voltage / Tolerance			230Vac +	/- 10%					
Maximum Current absorbed from mains	3x 12A	3x 17A	3x 17A	3x 25A	3x 25A	3x 50A			
nput Frequency / Tolerance		50Hz +/- 5%							
EMI		EN50091-2 Class A							
Output									
Waveform / Output THD			True sine wave	e / <3% THD					
Nominal Voltage			230\	ac ac					
Voltage Stability		+/- 1%							
/oltage Dynamic Step Load (o to 100% to o)	+/- 5%								
requency / Frequency Stability	50Hz Line synchronised +/- 1% / Free running +/- 0.2%								
On Line Mode Efficiency at full load	>90%								
Economy Mode Efficiency at full load	>98%								
Crest Factor	3:1								
Over Load Protection	100% - 125% load for 10min. / 125% - 150% load for 1min. / >150% load bypass								
Short Circuit Protection	Electronic short circuit protection								
Batteries									
Гуре			Sealed Lead Acid –	Maintenance Free					
Number of 12V Blocks	20	20	20	30	30	30			
Float Charging Voltage	270Vdc	270Vdc	270Vdc	405Vdc	405Vdc	405Vdc			
End of Discharge Voltage	200Vdc	200Vdc	200Vdc	300Vdc	300Vdc	300Vdc			
Equalising Boost Charge Voltage	280Vdc	280Vdc	280Vdc	422Vdc	422Vdc	422Vdc			
Battery Location			Inter	nal					
Battery Test	Optional Automatic								
General									
Protection Degree			IP2	1					
Communication			Dry contacts plus RS232 / Op	tions for SNMP & Modbus					
Software			T-Mon supplied	as standard					
Temperature/Relative Humidity/Altitude		0°C to	40° C / 90% max (non-conde	nsing) / <1000m (above sea	level)				
Acoustic Noise at 1m Distance	<42c	lbA		< 550	lbA				

265 x 740 x 950

110

106

230

505 x 650 x 1225

200

PowerPro HP 300 Series

Three Phase Input & Output Online Double Conversion UPS

High Performance Advanced Power Protection



BPC UPS in Parallel – One step beyond redundancy

The BPC philosophy is both simple and elegant. UPS outputs are connected directly to the users distribution system, eliminating the vulnerable centralised static switch and control circuits. PowerPro HP can grow with you and give you complete flexibility whether you are planning to improve system security or increase your power requirements. Redundant, symmetric and hot standby modes are all selected from the LCD control panel.

Rectifier Clean Versions

Defining new standards in input power factor correction and reduction of harmonic currents. Both 12 pulse and 18 pulse clean version rectifiers are available offering improved power factor correction up to 0.96 and reducing total harmonic distortion to less then 5%.

Features:

- True double conversion technology
- Galvanic isolation transformer at the inverter stage
- High reliability with low maintenance
- Pure sine wave output
- High efficiency up to 90%
- Intelligent battery monitoring to maximise service life
- Automatic static bypass switch providing no-break transfer
- Capability for parallel redundant operation if required
- LCD panel providing real time operational status
- Recorded power history logs
- RS232 and dry contacts for communication and remote monitoring
- Input / output customisation is available

Model	HP305	HP310	HP315
Power Rating kVA	5	10	15
Power Rating kW	4	8	12
Input			
Voltage			
Tolerance			
By-pass Voltage			
Maximum Current absorbed from mains	15.0	19.4	29.1
Input Frequency / Tolerance			
EMI			
Output			
Waveform			
Nominal Voltage			
Voltage Stability (balanced load)			
Voltage Stability (unbalanced load)			
Voltage Dynamic Step Load (o to 100% to o)			
Frequency			
Frequency Stability			
On Line Mode Efficiency at full load			
Economy Mode Efficiency at full load			
Crest Factor			
Over Load Protection			
Total Harmonic Distortion (THD)			
Short Circuit Protection			
Batteries			
Туре			
Number of 12V Blocks			
Float Charging Voltage			
End of Discharge Voltage			
Equalising Boost Charge Voltage			
Battery Location			
Battery Test			
General			
Protection Degree			
Communication			
Software			
Temperature Range			
Temperature Range Altitude			
-			
Altitude	<56 dbA	<56 dbA	<56 dbA
Altitude Relative Humidity (non condensed)	<56 dbA 0.4	<56 dbA 0.8	<56 dbA 1.18
Altitude Relative Humidity (non condensed) Acoustic Noise at 1m distance			
Altitude Relative Humidity (non condensed) Acoustic Noise at 1m distance Heat Dissipation at Nominal Load (kW)			1.18





The British Power Conversion Company



HP3120

HP3150

HP3200



HP3250

HP3300

20	30	40	60	80	100	120	150	200	250	300	
16	24	32	48	64	80	96	120	160	200	240	
230 / 400Vac Three Phase, 4 wires, +ground											
+/- 15%											
	230 / 400Vac Three Phase +/- 10%										
38.8	58.6	77.9	117.1	156.6	194	233.3	309.8	387.3	486.5	580	
	50Hz +/- 5%										
	EN50091-2 Class A										

HP3100

True sine wave / <3% THD

HP360

HP380

230/400VAC 3 Phase

+/- 1%

+/- 1%

+/- 5%

50Hz Line synchronised +/- 1% / Free running +/- 0.2%

Line synchronised +/- 1% Free running +/- 0.2%

>90%

>98%

3:1

100% - 125% load for 10min. 125% - 150% load for 1min >150% load by-pass

⟨3%

Electronic short circuit protection

Sealed Lead Acid – Maintenance Free

30

405 Vdc

300Vdc

422Vdc External

Automatic

IP21

Dry contacts plus RS232

 $\hbox{T-Mon standard, SNMP module optional}\\$

0°C to 40° C

<1000m (above sea level)

90% max

<56 dbA	<56 dbA	<56 dbA	<60 dbA	<60 dbA	<60 dbA	<65 dbA	<65 dbA	<70 dbA	<70 dbA	<70 dbA
1.6	1.8	2.4	3.6	4.8	7.9	9.5	12.7	15.8	19.85	23.7
		570x820x1400		710x800x1400 1100x800x1650		1195x870x1730		1565x925x1880		
2 66	322	484	562	620	770	810	960	1150	1285	1416

PowerPro PowerCentre

Three Phase Input & Output Online Double Conversion UPS Professional Power Protection

Features:

- Adaptive control dual mode technology
- Rectifier 'Soft Start' control
- Intelligent battery monitoring
- Powerful multiprocessor based design
- Parallel capability
- High reliability with low maintenance
- Sophisticated control and monitoring panel
- Automatic and manual static bypass
- Robust transistorised inverter



Model			PPC300	PPC400	PPC500	PPC600	PPC800			
Power Rating kVA/kW	200/160	250/200	300/240	400/320	500/400	600/480	800/640			
Power Factor				0.8						
Input										
Voltage		230/400 VAC 3 phase 4 wires + ground								
Tolerance		+15% -20%								
Input Frequency		50Hz +/- 10%								
Max RFI		EN50091-2 Class A								
Output										
Voltage		230/400 VAC 3 phase, 4 wires + ground								
Voltage Stability		Static (bal	anced load) +/-1%, Static	(unbalanced load) +/-1%	, Dynamic (stop load 0-10	0%) +/-5%				
Voltage Recovery Time				10ms						
Frequency		50Hz								
Frequency Tolerance		+/-2,3,4 or 5% selectable, Free running +/-0.01%								
Efficiency at 100% Load		95%								
Crest Factor		3:1								
Short Circuit Protection		Electronic short circuit protection								
Overload Capacity		110% for 60mins, 125% for 10mins, 150% for 60sec								
Total Harmonic Distortion (THD)		Linear +/≺1%, Non linear +/≺5%								
Batteries										
Туре		Sealed Lead Acid – Maintenance Free								
Number of Cells				192 volts						
Float Charging Voltage				428 volts adjustable						
Boost Charging Voltage				436 volts adjustable						
End of Discharge				320 volts						
Battery Ambient Temperature				20° C to 25° C						
Battery Test				Automatic						
General										
Serial Communication				Dry contacts plus RS232						
Protection Degree				IP20						
Operating Temperature				0° C to 40° C						
Storage Temperature				-10° C to 50° C						
Humidity			(90)	% at 20° C (non condensi	ng)					
Altitude Power Derating			Over	r 1000m use 5% each 100	00m					
Ventilation				Forced air cooling						
Acoustic Noise at 1m distance		65	5dBA			78dBA				
Weight (kgs)	2100	2500	2800	3000	4500	5000	7000			
Dimensions (mm) w x d x h		00x1800	2360x900x1800	2920x900x1800	3880x900x1800	4780x9				

PowerPro EL 100 Series

Single Phase Input & Output Online Static Inverter

High Performance Static Inverter

Acoustic Noise at 1m distance



Features:

- Designed to the latest European EN 50171 Specification for Emergency Lighting
- True double conversion and PWM technology
- Inverter stage output galvanic isolation transformer included
- Up to 91% efficiency
- Capable of 120% continuous overload to meet European Emergency Lighting regulations
- Parallel mode operation (optional) (hot standby, redundant, symmetric parallel)
- · Large charger for faster recharge of batteries
- Maintenance bypass (for complete isolation of the inverter during maintenance)
- Unique inverter design to suit high inrush lighting loads
- Bypass to load (changeover mode) user selectable
- LCD panel providing accurate detailed information about load, batteries and inverter with advanced diagnostics
- RS232 and dry contacts for communication and remote monitoring

Model				EL108	EL110	EL112			
Power Rating kVA/kW	4 / 3.2	5 / 4	6 / 4.8	8 / 6.4	10/8	12.5 / 10			
Power Factor		0.8							
Input									
Voltage / Tolerance			230 VAC single	e phase, +/- 15%					
By-pass Voltage		230 VAC single phase							
Input Frequency		50Hz +/- 5%							
Max RFI		EN50091-2 Class A							
Output									
Voltage		230 VAC single phase							
Voltage Stability		Static (balanced load) +/-1%, Static (unbalanced load) +/-2%, Dynamic (step load 0-100%) +/-5%							
Voltage Recovery Time		After step load 0-100% max. 20ms							
Frequency		50Hz							
Frequency Tolerance	Line synchronised +/- 1% / free running +/- 0.2%								
Efficiency at 100% Load	x87-91%								
Crest Factor	3:1								
Short Circuit Protection	Electronic short circuit								
Overload Capacity	120% continuous, 150% load 10min. 180% 1min, 200% for 1 sec								
Total Harmonic Distortion (THD)	Linear Load <3% / non linear load (75%NP and CF 3:1) <5%								
Batteries									
Туре			Sealed Lead Acid	- Maintenance Free					
Number of 12V Blocks	16		18		20				
Float Charging Voltage	216Vdc		243Vdc		270Vdc				
End of Discharge Voltage	160Vdc		180Vdc		200Vdc				
Battery Ambient Temperature			2!	5°C					
Battery Protection			Circuit	breaker					
Battery Test			Automatic batter	y test once a week					
General									
Serial Communication			Dry contact	s plus RS232					
Software			T-Mon standard / S	NMP module optional					
Protection Degree			II	P41					
Ambient Operating Temperature / Altitude			0°C to 40°C / <100	Om (above sea level)					
Standard			Emergency Lig	ghting EN 50171					
Ventilation			Forced :	air cooling					

300X500X1220

PowerPro EL 200 Series

Three Phase Input & Single Phase Output Static Inverter

High Performance Static Inverter



Features:

- Designed to the latest European EN 50171 Specification for Emergency Lighting
- True double conversion and PWM technology
- Inverter stage output galvanic isolation transformer included
- Up to 91% efficiency
- Capable of 120% continuous overload to meet European Emergency Lighting regulations
- Parallel mode operation (optional) (hot standby, redundant, symmetric parallel)
- Large charger for faster recharge of batteries
- Maintenance bypass (for complete isolation of the inverter during maintenance)
- Unique Inverter design to suit high inrush lighting loads
- Bypass to load (changeover mode) user selection
- LCD panel providing accurate detailed information about load, Batteries and Inverter with advanced diagnostics
- RS232 and dry contacts for communication and remote monitoring

Model		EL215	EL220				
Power Rating kVA/kW	10 / 8	15 / 12	20 / 16				
Power Factor		0.8					
Input							
Voltage / Tolerance		230/400 VAC 3phase, 4wires, +ground, +/- 15%					
By-pass Voltage		230 VAC single phase					
Input Frequency		50Hz +/- 5%					
Max RFI		EN50091-2 Class A					
Output							
Voltage	230 VAC single phase						
Voltage Stability	Static (balanced load	d) +/-1%, Static (unbalanced load) +/-2%, Dynamic (stop l	oad 0-100%) +/-5%				
Voltage Recovery Time		After step load 0-100% max. 20ms					
Frequency		50Hz					
Frequency Tolerance		Line synchronised +/- 1% / free running +/- 0.2%					
Efficiency at 100% Load	>87-91%						
Crest Factor	3:1						
Short Circuit Protection	Electronic short circuit						
Overload Capacity	120% continuous, 150% load 10min. 180% 1min, 200% for 1 sec						
Total Harmonic Distortion (THD)	Linear Load <3% / non linear load (75%NP and CF 3:1) <5%						
Batteries							
Туре		Sealed Lead Acid – Maintenance Free					
Number of 12V Blocks		30					
Float Charging Voltage		405					
End of Discharge Voltage		300VDC					
Battery Ambient Temperature		25℃					
Battery Protection		Circuit breaker					
Battery Test		Automatic battery test once a week					
General							
Serial Communication		Dry contacts plus RS232					
Software		T-Mon standard / SNMP module optional					
Protection Degree		IP41					
Ambient Operating Temperature / Altitude		0°C to 40°C / <1000m (above sea level)					
Standard		Emergency Lighting EN 50171					
Ventilation		Forced air cooling					
Relative Humidity		90% max (non-condensing)					
Acoustic Noise at 1m distance		<56 dbA					
Weight (kgs)	200	210	240				
0 , 0 ,	200						



PowerPro EL 300 Series

BPC

The British Power Conversion Company

Three Phase Input & Output Static Inverter

High Performance Static Inverter



Features:

- Designed to the latest European EN 50171 Specification for Emergency Lighting
- True double conversion and PWM technology
- Inverter stage output galvanic isolation transformer included
- Up to 91% efficiency
- Capable of 120% continuous overload to meet European Emergency Lighting regulations
- Parallel mode operation (optional) (hot standby, redundant, symmetric parallel)
- Large charger for faster recharge of batteries
- Maintenance bypass (for complete isolation of the inverter during maintenance)
- Unique Inverter design to suit high inrush lighting loads
- Bypass to load (changeover mode) user selection
- LCD panel providing accurate detailed information about load, Batteries and Inverter with advanced diagnostics
- RS232 and dry contacts for communication and remote monitoring

Power Rating kVA/kW	10 / 8	15 / 12	20 / 16	25 / 20	30 / 24	40 / 32	60 / 48	80 / 64	100 / 80	120 / 96	160 / 12
Power Factor		0.8									
Input											
Voltage / Tolerance		230/400 VAC three phase, 4wires, +ground, +/- 15%									
By-pass Voltage					230,	400 VAC three	phase				
Input Frequency						50Hz +/- 5%					
Max RFI					Е	N50091-2 Class	s A				
Output											
Voltage		230/400 VAC three phase									
Voltage Stability			Static (b	alanced load) +/	-1%, Static (unl	balanced load) -	+/-2%, Dynamic (stop load 0-10	00%) +/-5%		
Voltage Recovery Time					After ste	p load 0-100%	max. 20ms				
Frequency						50Hz					
Frequency Tolerance				1	Line synchronis	ed +/- 1% / free	running +/- 0.2%	%			
Efficiency at 100% Load						>87-91%					
Crest Factor		3:1									
Short Circuit Protection		Electronic short circuit									
Overload Capacity		120% continuous, 150% load 10min. 180% 1min, 200% for 1 sec									
Total Harmonic Distortion (THD)		Linear Load <3% / non linear load (75%NP and CF 3:1) <5%									
Batteries											
Туре					Sealed Lea	ad Acid – Mainte	enance Free				
Number of 12V Blocks		30									
Float Charging Voltage						405					
End of Discharge Voltage						300VDC					
Battery Ambient Temperature						25°C					
Battery Protection						Circuit breaker	r				
Battery Test					Automati	c battery test o	nce a week				
General											
Serial Communication					Dry	contacts plus R	S232				
Software					T-Mon stand	lard / SNMP mo	dule optional				
Protection Degree						IP41					
Ambient Operating Temperature / Altitude					0°C to 40°C	/ <1000m (abo	ve sea level)				
Standard					Emerg	ency Lighting El	N 50171				
Ventilation						Forced air coolir	ng				
Relative Humidity					90%	max (non-conde	ensing)				
Acoustic Noise at 1m distance			<56 dbA			<60) dbA		<65	dbA	
Weight (kgs)	260	276	332	494	494	572	630	780	820	970	1160
		520x715x1170									



Static Transfer Switches

Three Phase

Power Supply Security



Features:

- Ultra fast Break Before Make switching eliminates connecting the two sources together even under fault conditions
- Less than 5ms transfer between synchronised sources
- Selectable preferred source
- A fuseless rugged, high reliability SCR device eliminates fuse replacement
- Digitally controlled system set points
- Programmable synchronised and unsynchronised transfers
- Switched neutral option maintains isolation between sources
- Diagnostics and transfer tests to verify system readiness
- Load overcurrent transfer inhibit to prevent transfer of a fault to the second source
- Dramatic increase in reliability and availability of critical devices
- Redundant cooling fans
- Integral isolated maintenance bypass sustains power to the load even during maintenance and repair
- LCD display and keypad for messages, alarms, measurements, diagnostics and settings of the parameters from the front panel
- RS232 bi-directional communication to provide monitoring and setting of the STS via a PC
- 7 available dry contacts

Model		STS350	STS3100	STS3150	STS3200			
Input								
Voltage			230/400VAC 4 wires					
Frequency	50 or 60Hz +/-5%							
Voltage Distortion		<10%						
Output								
Current	25A	50A	100A	150A	200A			
Voltage	230/400VAC 4 wires							
Overcurrent Inhibit LCD front panel, MBP	Standard							
General								
Dimensions wxdxh (mm)	570 x 500 x 1415							
RS232 Port	Standard							
Dry Contacts			7 dry contact outputs					
Switched Neutral			Optional					
Ambient Temperature	0° - 40° C							
Humidity	0 – 95% (non condensing)							
Standards	EN50091-2 class A ISO9001							
AC/AC Efficiency			>98%					
Transfer Time	<5m		for synchronised sources: <11m sec. ransfer is always Break Before Make					
Overload	150% for 15min. 1000% for 40m sec							



Casbar

Outdoor Cabinets - Premium quality



Casbar offers a range of European manufactured outdoor cabinets available in numerous versions with a standard basic design, ideal for configuration upon order, with its variations and accessories these cabinets can be adapted to suit all your specifications and requirements. All Casbar products are manufactured to a high quality, all standard versions are sandblast and water blast proof, with a protection degree that can reach IP55-DIN 40050.

Accessories:

- Solid door stay, with stops at 90° and 135°
- 19" swing frame, removable, with transport safety device
- Door stay, telescope type
- Distribution unit
- Lockable opening for cable connection
- Heat exchanger
- Separate operation box
- Folding shelf on the door
- Air conditioning unit
- Heating unit
- Vapour barrier with insulating foam on a special plinth
- Side door, height according to necessity
- A hinged rain cover



"SEC" Double Wall Outdoor Cabinets

Features:

- Mono-block structure
- Side panels, back panel and door have double wall protection level up to IP55
- Interior plinth and double roof
- Locking system with 3 points and ergonomic handle
- Standard finishing with polyester painting RAL 7035 or 7032
- Possibility of other finishes



CID 200 Outdoor Cabinet

Features:

- Frame made of extruded aluminium profiles
- Modular manufacturing
- Protection level up to IP55
- High capacity of heat dissipation

Stainless Steel Double Wall Outdoor Cabinets

Features:

- Double wall mono-block structure
- Manufactured in stainless steel
- Protection level up to IP55
- Finish according to RAL-colours
- Strong structure and ergonomic design to host active equipment
- Possibility of different roofs
- Dimensions and configurations according to custom requirements

PowerStor Battery Range

Standby Battery Systems







Unique processes are used in the grid alloy and electrolyte providing easy recharge to normal levels after being

deeply discharged.

In today's environment battery systems must perform in the most challenging applications. The versatile PowerStor range of sealed lead acid maintenance free batteries has all the answers with a wide choice of capacity ratings in compact cases for both standard and extended design life suitable for both cyclic and float applications.

BPC is at the forefront of modern power protection technology and our expertise in the design, development and manufacture of special and custom battery systems enables us to meet the diverse needs of the leisure, industrial, commercial, emergency services, medical and defence markets.

Typical applications

- Fire alarm and Security systems
- Industrial Control systems
- Emergency lighting
- Model and toy products
- Uninterruptible Power Supplies
- · Sports and Leisure equipment
- Computer / Network products
- Mobility vehicles
- · Telecom equipment
- Portable equipment

General features and benefits:

Deep Discharge Recovery

General reatures and benefits:									
Low self discharge	Allowing the battery to be stored for extended periods without permanent loss of capacity								
Electrolyte Suppression System	PowerStor's unique construction and sealing technique ensures no free electrolyte can escape								
Operation in Any Orientation	Design flexibility allows operation in any orientation with no loss of performance or concern for electrolyte leakage (exception of continuous use in the inverted position)								
Compact PowerStor Design	Offers a high energy density, providing excellent power/volume/ weight ratios								
Float or Cyclic use High Performance Design	Allows use for both cyclic and continuous float applications								
Wide Operating Temperature Range	PowerStor batteries can be operated in temperatures of -10°C to +50°C. However, continuous use at higher levels does affect service life								
Flexible Design	PowerStor batteries are manufactured using a range of terminals to suit most standard applications but custom designs are available								

The British Power Conversion Company

PowerStor Range

Sealed Lead Acid Maintenance Free



PowerStor - PS (standard) Series

Utilising the latest advanced absorbed glass mat (AGM) and gas recombination technology, PowerStor valve regulated sealed lead acid (VRLA) batteries ensure maintenance free, reliable performance, and outstanding service life with 5 years expectation in float standby applications.



PowerStor - PSL (long life) Series

For mission critical applications requiring longer inservice life the PowerStor PSL range is available with an enhanced grid and separator design. As a result of the largely increased battery life, up to 10 years in optimum float conditions, it is possible that electrical equipment can be supported throughout their own full service life without it being necessary to change the battery.

PowerStor - PSLIFR (2V - 15yr life) Series

The ultimate in reliability, quality, technology and safety the PowerStor PSLIFR range of 2 volt single cell batteries has excellent service life up to 15 years in optimum float conditions. Each cell has a flame retardant case and lid as standard and meet BS6290 Part 4 specifications.



PowerStor Special Application Batteries

Standby Battery Systems

PowerStor - PSLRACK Range

The PowerStor PSLRACK range of sealed lead acid batteries is designed for mission critical telecommunication and industrial applications requiring longer in service life up to 10 years in optimum float conditions. The batteries are designed to be compatible and able to fit in 19" telecom cabinets with ease. With a wide choice of capacity ratings in compact rackmount cases, the PSLRACK range can suit any autonomy requirements.





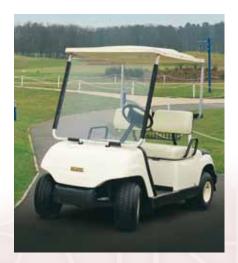
PowerStor - Nickel Cadmium Range

PowerStor Nickel Cadmium Batteries are manufactured in basic ranges to match specific operating conditions and provide different performance characteristics. All nickel cadmium batteries use relatively expensive materials to combine maximum performance with minimum maintenance and optimum life of 20 to 25 years. Thus the nickel cadmium battery may be more expensive in the initial cost than lead acid batteries but will be considerably more cost effective over the long term.

PowerStor – Gel Range

For mission critical deep cycle applications requiring longer in- service life, the PowerStor Gel range is available with an enhanced grid / separator design and a gelled electrolyte introduced to the cell by means of custom built vacuum filling machine technology. As a result Gel batteries have many advantages over AGM such as full recovery from deep discharge, good tolerance to higher temperature applications, excellent performance over long discharges and improved charge acceptance due to low internal resistance so it is important to choose the right battery for your application.





PowerStor – EV Range

Cyclic sealed lead acid batteries for electric vehicle applications. The versatile PowerStor EV range of sealed lead acid batteries offers higher performance against deep discharge, repeat daily cycling, higher temperature and mobile type applications. With a wide choice of capacity ratings in compact cases we can offer solutions for the most challenging applications.



PowerMaster Series

Automatic Voltage Regulators

Stabilised Power Protection



The British Power Conversion Company

Designed to give you voltage regulation with all the flexibility and adaptability you need. These modern and compact units have an enviable reputation for consistent reliability, ease of installation and maintenance making them ideal for sophisticated applications.



PowerMaster AVR Series

The PowerMaster AVR provides voltage regulation protecting your load from all major fluctuations of the mains supply. It automatically disconnects the voltage outputs electromechanically when an increase or decrease occurs out of the specified limits helping to prevent serious damage to the loads.

The booster transformers and sensitive variac carry out all the voltage regulation. This is part of a Servo Controlled system which is based on the management of a DC motor by thyristors.

Output voltage can be monitored via an analogue display. Over current protection is ensured by a magnetic switch and internal cooling is provided by fan ventilation. In single phase models the inside structure is designed to operate with natural convection cooling. Connections to the unit are by DIN Terminals.

Wide voltage range models may be produced upon request. The standard voltage range of these models may also be altered upon request.

Features:

- High efficiency
- Servo controlled system
- Electro-mechanical high-low voltage protection
- Short circuit protection
- Ability to work with non-linear loads
- Natural cooling for single phase models
- Fan ventilation for three phase models
- · Bypass switch optional
- Output voltage meter

PowerMaster Line Conditioner Series

The PowerMaster Line Conditioner Series is designed to protect your electrical equipment from mains voltage fluctuations. They offer fast response regulation from an electronic controller, making this system ideal for more critical applications.

Features:

- Automatically adjust low or high voltage
- Suitable for home and office equipment
- Heavy duty, reliable design
- Resettable input overload protection circuit breaker
- · Lightning and spike protection
- RJ-11 connection provides surge and spike protection



Industrial Applications

Power Protection Products to suit any application





Frequency and Voltage Converters

The PowerPro HP range of products offers very flexible technology which can be designed for frequency conversion 50, 60 or 400Hz solution and/or voltage changes enabling us to meet your industrial specification and requirements. All PowerPro FC and VC ranges have an enviable reputation for consistent reliability, ease of installation and maintenance making them ideal for intelligent control equipment, oil, gas and petrochemical industry, hospital and medical, airport ground support, defence, avionics and navigation aid applications.

AC / DC Power Supply Complete System

BPC offers a wide range of standard and customised DC power supply systems using the modular rectifier technology. All systems are scalable, redundant and can be configured according to the customer's requirements. Due to the hot-swappable technology all systems have a high availability and can be updated to the actual power requirement during operation. This guarantees long-lived DC power supplies without any interruption of the load supply.

Features:

- Easy to handle 19"system
- Ability to change modules during normal operation
- Compact designs
- Low weight of single components
- Parallel operation ability (N+1 principle)
- Remote maintenance via modem optional





Customised Hybrid Power Supply System

The PowerPro HP UPS technology can be combined with modular DC power supplies to provide an effective hybrid AC/DC power supply system. It is designed to give both UPS and DC outputs with all the flexibility and adaptability needed. This modern, compact hybrid AC/DC system has an enviable reputation in consistent reliability, ease of installation and maintenance making it ideal for telecommunications, instrumentation, industrial, defence, medical and process control applications.

In today's environment AC/DC systems must satisfy the most challenging applications and the versatile PowerPro Hybrid AC/DC System has all the answers with a wide choice of power ratings paralleling capability, N+1 redundant configuration and standby autonomies in compact and stylish cabinets.



Inverters – DC/AC Systems

BPC inverters are very robust units with a high overload ability. They are likely to be used in rugged industrial environments and in offshore applications. All current European safety and EMC standards are fulfilled. The 19" versions have connectors at the rear. On demand, several inverters can be connected in parallel operation in order to increase the power or to increase the availability (redundant operation). Additional electronic bypass switches can be used for a further increase in availability of AC power supply systems.

Features:

- 19" rack or wall cabinet versions available
- · High overload ability
- Parallel operation of several units possible
- Easy customising for special output voltages/frequencies
- Internal fan cooling

Compact Rectifier Charger Modules

Solutions for both rectifier and battery charging applications are based on modular primary switched mode power systems with a compact design and very high power density. The compact modules enable a lot of new application fields in industrial environments especially in constricted installation facilities. All systems have the capability for further modules to be added in parallel operation resulting in high-grade flexibility and reliability by providing N+1 configuration.



Accessories

Many accessories to be used alongside the existing BPC product portfolio

PowerStor Battery Monitor and Diagnostic System

Comprehensive Low-cost Monitoring for Critical Batteries.

In critical standby applications the battery can be a large integral part of the system and can also be an unpredictable element of the design. The fact that battery condition can be invisible and not be determined from its appearance makes early diagnoses hard especially if problems have been experienced in transit, storage, installation, poor site conditions or mis-use causing the failure of just one cell which can open-circuit a complete battery.



Battery Monitor with Detecting Unit

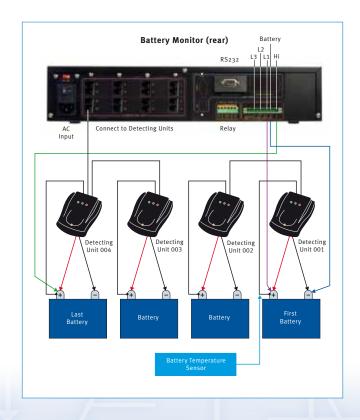
PowerStor Battery Monitor screens the state-of-health of the battery to within known parameters and can easily identify any trouble spots with early warning reports being given by actual print out / RS232 communication port / USB or SNMP.

PowerStor Battery Monitor works independently and intelligently without the need for a computer. The method of testing is passive and non-invasive without making intrusion to affect the batteries which is both safe and minimises battery stress thus providing a very efficient, accurate and economical way of determining battery performance, reliability and overall condition.

Features:

- · Very efficient and economical method of testing
- Predicts possible failures before catastrophic problems are encountered
- Passive method of testing minimises battery stress
- Early diagnosis permits early treatment
- Enhances system reliability
- Reduces frequent site inspection and the need for manual measurements
- Effectively extends the battery life expectancy

BPC have determined that a continuous monitoring system is the most dependable way to monitor battery performance and ensure future reliability. PowerStor Battery Monitor will scan all the pertinent battery parameters such as overall terminal voltages, individual voltages, temperature and internal resistance for each cell/block using a unique Detecting Unit. All the Detecting Units are checking the battery 300 times/sec and reporting back to the Battery Monitor which analyses all the battery data.





Automatic Transfer Switches (ATS)

Intelligent automatic transfer switch that can be powered from two UPS, different mains supplies or a combination of both. Also acts as a PDU with compatibility for six network devices to be connected from its output sockets.

Higher reliability levels are achieved by using dual power sources and outlets can be programmed to schedule individual device shutdowns, or delay priorities ensuring maximum uptime and control for the user.

Front panel has a LCD display providing input & output status, alarms and key measurements information which can also be remotely monitored using RS232, USB or Simple Network Management Protocol (SNMP) communications.

Designed for 19" rackmount the ATS is 1U high with a depth of 250mm.



Features:

- Auto Switch for two input sources
- Auto phase switch L+N isolated
- Display individual outlet status
- LCD to provide status / alarm information
- Support schedule shutdown
- Shutdown delays time programmable
- Individual outlet properties

External Automatic and Manual Bypass Switches

All BPC UPS are equipped with an Automatic Bypass Switch which allows for instantaneous transfer to mains or reserve supply if the power demand of the load exceeds the overload level of the inverter or a short circuit is experienced.

However, an optional Manual Bypass Switch facility may be provided to offer the opportunity to do commissioning, routine maintenance, repair or remove the equipment without any interruption to the critical load. Both make-before-break (MBB) and break-before-make (BBM) bypass switch designs are available.

BPC provides a comprehensive range of bypass switches which are built to the highest standards using proven components and are available in both single and three phase with variations for dual input supplies or parallel redundant configurations. Bypass switches can be customised and tailored to suit specific requirements for either UPS or DC systems including the integration of output distribution boards, castell interlock systems or auxiliary contacts within the same enclosure.





Accessories

Many accessories to be used alongside the existing BPC product portfolio

Simple Network Management Protocol (SNMP) Modules

Using the SNMP module your BPC UPS acts as a network device that allows monitoring of more than one UPS connected to your network through the SNMP VIEW software supplied with the module, or you can monitor the UPS through an Internet/Web browser. It also provides for automatic shutdown of multiple servers and workstations on the network using the advanced ClientMate software. SNMP modules can be internal UPS factory fitted or provided as an external adaptor.



Port Multiplexer

Allows two devices to be connected to a single RS232 serial communication port on a UPS. It can be used when a separate Intelligent Power Management interface and Remote Monitoring Panels are both required.

MODBUS Adaptors

BPC have a wide range of MODBUS/JBUS adaptors that support RS485 and TCP/IP connectivity to ensure the device provides continuous, reliable and accurate network monitoring of the UPS system through a Building Management Systems (BMS).

RS485 Converter

Using a BPC RSC 24 you are able to convert the RS232 interface to RS485. Should be used if the distance between UPS and its receiving interface exceeds 20 metres

Customised Interfaces

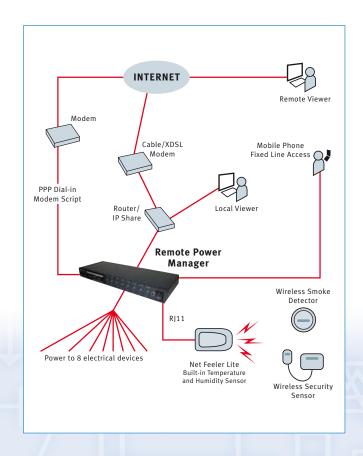
With a Multi-interface slot various communication combinations are selectable including additional RS232, AS-400, USB, Dry Contact Relays and customised packages.

PowerSwitch – Remote Power Manager

The Remote Power Manager is the answer to providing your system with a safe remote power-up, power-down and reboot. It allows a scheduled and systematic shutdown or power-up to your individual devices saving you both time and money. Customised TRAP and Email alerts can also be sent on predefined criteria. Up to 16 Remote Power Manager units can be daisy chained to provide control over 128 devices. Each configuration will have one Master unit and 15 Slave units.

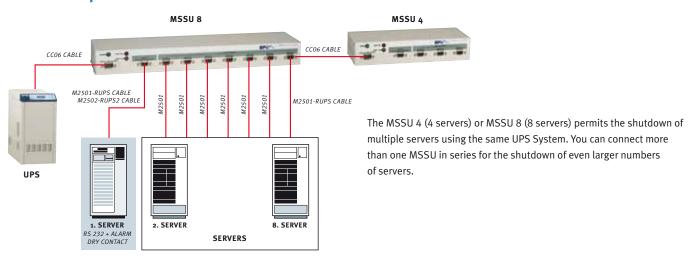
Features:

- Supports TCP/IP, SNMP, HTTP, SMTP, PPP, SNTP, TELNET protocol
- Connect using 10/100mbps Ethernet, modem dial-up or a phone
- Safe power-up, power-down or rebooting
- Individually controls each of the eight AC receptacles from anywhere using standard Web Browser
- Remotely and individually reboots locked servers
- Receive daily / event alerts
- Sequentially apply power to equipment plugged into the RMP
- Customised TRAP and e-mail notification
- Remote setup support
- Environmental monitoring capabilities (humidity, temperature, smoke, motion, etc)





MSSU - Multiple Server Shutdown Units





Remote Monitoring Panel

All PowerPro HP & CL ranges of UPS Systems can be connected to a remote monitoring panel (RMP) that allows the possibility to monitor different parameters from the control panel of the UPS System.

More than one RMP can be connected together in cascade for monitoring your UPS System from several different locations at the same time. The normal distance for locating a RMP in its standard format is 20m from the UPS, however longer distances can be achieved using the optional RS485 converter.

Mains & Load Cables

BPC offers a full range of UPS and DC products which have to be connected to the mains supply and critical load. Most products are provided with the essential cable kit for plugging into the mains supply and connecting the load. However, in many instances the application may require additional IEC to IEC 320 load cables, different load sockets such as IEC, Schuko, NEMA or special military type connections. BPC can provide these in addition to longer length connection cables if required.

Any special power connection requirements can be designed and manufactured by BPC.



Service and Support

Quality BPC Service through experience and dedication



Installation

All BPC installations are carried out by approved installation engineers who are experts in the installation of UPS and related equipment. If required BPC can provide a managed turnkey service which provides for delivery to site and all associated installation electrical and building work. All BPC installations are compliant with current regulations and full certification will be issued on completion.

Commissioning

For those customers who prefer to carry out their own installation BPC offer a range of commissioning services from basic inspection, start up and calibration to full load discharge testing.



Maintenance

The reason for buying a UPS is to protect valuable data and systems, and the hardware and software that support it. If the UPS fails to perform when needed it has been a total waste of time and money; routine maintenance and inspection on your UPS can ensure that when it is needed it will work as required.

Routine inspection and maintenance should be seen as a fundamental part of any power protection strategy.

Regular maintenance will ensure the cooling systems of the UPS are kept in optimum condition while routine inspection can detect many latent battery and other problems and prevent them becoming expensive disasters.



Site Surveys

Carried out by a BPC engineer or a BPC approved installation engineer, a Site Survey will provide all the information required for accurate costings to be prepared of all the work necessary for the installation of the UPS. This can include all site preparation, remedial building work and the provision of air conditioning in addition to electrical services.

Hire and Loan

Not only do BPC offer an extensive range of Power Protection Products for sale, but also have a selection of suitable products available on a Hire and Loan basis. This service is available as any one of the following circumstances may arise:

- Temporary situations, during exhibitions, seminars, road shows or refurbishments
- During planned power interruptions, when building work is taking place
- While an upgrade is planned and the load is increased
- More suitable for you to hire rather than purchase at that time
- Mission-critical activity is occurring
- During the start up period of your new business
- To see whether a long-term investment of a UPS would be appropriate in your circumstance





Battery Supply & Replacement

In today's environment battery systems must perform in the most challenging applications. BPC's versatile PowerStor range of sealed lead acid batteries has all the answers with a wide choice of capacity ratings in compact cases for both standard and extended design life suitable for both cyclic and float applications. As agents of the world's major lead acid and nickel cadmium battery manufacturers BPC can provide cost effective solutions to your battery requirements. BPC will design and install a battery system suitably sized to provide your power protection unit with the required autonomy. All battery installations are carried out to the manufacturers' specifications and hold a full warranty.

System Design

BPC are able to offer system design to meet with all your exact requirements regardless of the size or complexity of your application. They can tailor a solution to suit both your commercial and technical requirements by utilising either modified commercially off the shelf (COTS) products or custom built as a bespoke design.

BPC has a dedicated team of managers and engineers who can also provide a total turnkey solution from surveying our site through to complete commissioning of the system.

All solutions are backed up by our Service Support Team who can offer after-sales maintenance packages.

Battery Testing & Maintenance

For large batteries BPC can carry out detailed monitoring, testing and maintenance programmes to help protect the considerable investment such battery installations represent. All BPC testing is carried out using conventional methods supported by impedance testing where appropriate.

Battery Disposal

With new legislation and increasing environmental awareness safe disposal of spent batteries is essential. BPC can arrange safe disposal in compliance with all hazardous waste requirements.

Training

BPC offers fully flexible training courses to suit any specific requirement of our customers. Our quality training courses are led by highly experienced and knowledgeable BPC engineers available to answer any query and offer full technical assistance and guidance throughout.

Courses are generally held at our corporate headquarters in the UK offering a mixture of both classroom and workshop facilities in order to allow for all aspects of theory and practical training. However, as the BPC Group is an international company with offices and distributors across the world, we can offer fully tailored courses to take place around the globe.

The course can last anywhere between one day to a week depending on the content, and on successful completion of the course a Certificate will be awarded to each participant certifying proficiency.



Software

Intelligent Power Management



T-Mon Server

Supports Windows 95, Windows 98, XP, NT and Windows 2000 plus Linux. TMON Server connects a computer to the UPS and collects data when it communicates to the network

T-Mon SerCon

SerCon program receives the data from TMON Server and manages the shutdown event on the network clients computers. In addition to the normal "SerCon" automatic shutdown program TMON also provides source codes so that a programmer can compile their own requirements.

PowerSmart / WinPower & ViewPower

Power failures and abnormal supply conditions can occur at any time, including when your Network system is running unattended. When there is a power interruption, the UPS Software broadcasts a warning message to all workstation users on the network urging them to finish their current tasks. In the event of a lengthy power failure, the software automatically saves files and gracefully shuts down the operating system after a user-configured time period or when the UPS batteries are low on energy. The intelligent software can even notify an off-site systems administrator of the shutdown by paging them through a modem.

BPC UPS Software provides other useful management functions too, such as scheduling automatic system boot up and shutdown, monitoring UPS battery condition and logging and analysing abnormal utility power conditions.

T-Mon Admin (optional)

TMON Admin is developed to provide UPS management and monitoring in a WAN system. It supports TCP/IP and SNMP protocols.

TMON Admin allows you to manage, monitor and collect all the data logs from hundreds of UPS's which are connected to the WAN system.

TMON Admin supports multi SNMP agents such as Megatec SNMP, NetAgent II and USHA. It is possible to implant OEM SNMP agents MIB's as a customer request.





BPC has an extensive range of products to meet all your power protection demands

Small Home/Office UPS **PowerStar**

PowerStar Xtreme

Line Interactive UPS **PowerStar**

PowerPrem

PowerPrem Long Runtime options

Single Phase Double Conversion UPS PowerGem Pro

PowerPro HP 100 Series

Modular UPS **PowerTower**

Three Phase Double Conversion UPS **PowerPro** HP 200 Series

PowerPro HP 300 Series

PowerPro CL 300 Series Transformerless Range

PowerPro PowerCentre

Emergency Lighting Systems **PowerPro** *EL 100 Series*

PowerPro *EL 200 Series* **PowerPro** *EL 300 Series*

> **PowerMaster** SVR Electronic Stabilisers **PowerMaster** AVR Servo Stabilisers

DC Solutions Rectifier and SMPS Modules

> Automatic Transfer Switches Maintenance Bypass Switches

Remote Alarm Panels

Multiple Server Shutdown Units Remote Power Manager

SNMP Modules /Port Multiplexer /MODBUS Adaptors /RS485 Converter /Customised Interfaces

Mains & Load Cables

Software & Communication PowerSmart

T-Mon WinPower ViewPower

Batteries **PowerStor** *PS – Sealed Lead Acid 5 year design life*

PowerStor *PSL* – *Sealed Lead Acid 10 year design life*

PowerStor PSLIFR – (2 Volt blocks) Sealed Lead Acid 10 year design life

PowerStor *Gel and Cyclic options* **PowerStor** *Nickel Cadmium Vented Cells*

Generators Wide range of diesel generators

Authorised D	istributors
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