PowerGem™ Pro Series

Single and Three Phase Input & Single Phase Output
True Online Double Conversion UPS 6kVA – 30kVA

» Sophisticated » Reliable » Intelligent

VFI

The PowerGem Pro is the ultimate in UPS design with a full range of options and accessories to meet the demands of sophisticated network environments, ideally suited for mission critical applications such as vital servers, network and telecommunication equipment.

The PowerGem Professional range uses state-of-the-art technology and components to provide maximum network protection where the load is continuously supplied by the inverter with a filtered and stabilised waveform and frequency to the highest standards.

- » Server Rooms
- » Financial Services
- » Healthcare
- » Industrial
- » Telecommunications

PowerGem Pro Features

ADVANCED FUNCTIONAL LCD DISPLAY

The PowerGem Pro provides all round superior protection but remains easy to install and simple to operate from the front display panel and backlit LCD, showing input and output voltages, frequencies, battery readings and UPS operating status information.

- **True online double conversion**
- **Digital Signal Processor (DSP) technology**
- **Intelligent self-diagnostics**
- **Pure sinewave output**
- **Multiple communication ports**
- **Output power factor 0.8, 0.9 and unity options**
- **ECO Mode operation for energy saving**
- **Emergency Power Off (EPO) function**
- **Long runtime versions – optional large chargers**
- **Matching battery cabinets**
- **Galvanic Isolation Transformer (optional)**
- **Intelligent slot for SNMP or internal Relay card**
- **Maintenance Bypass**
- **Scalable redundancy parallel option**
- **Frequency Converter Mode**
- **Generator compatible**

N+X REDUNDANCY

The BPC philosophy is both simple and elegant. The UPS output is connected directly to the user's distribution system, eliminating the vulnerable centralised static switch and control circuits. PowerGem Pro models can be used in simple parallel operation with up to 3 units, allowing scalability for increased power capacity and improved reliability due to the redundancy operation.

MULTIPLE COMMUNICATION OPTIONS

This feature will allow either the USB or RS232 communication port to work with an SNMP simultaneously. Internal slots are provided for remote control and monitoring agents like SNMP and relay cards.

PROGRAMMABLE FREQUENCY CONVERTER

The PowerGem Pro series may be used as a frequency converter. Simple programming through the front LCD panel will allow you to lock the output frequency at 50 Hz or 60 Hz to suit frequency sensitive equipment.

LONG RUNTIME APPLICATIONS

Business continuity applications require long runtimes of several hours or even days. PowerGem Pro 'L' version are available where the internal battery has been replaced with super-efficient larger built-in chargers, giving 4x, 8x, 12x, 20x and 24x faster recharge capability and extended battery autonomy. Advanced battery test facilities are available to detect deteriorating condition and performance.

MATCHING EXTERNAL BATTERY CABINETS

For mission critical applications requiring longer runtimes or higher specification batteries, additional matching battery cabinets can easily be added. These have been designed both technically and aesthetically to complement the UPS, forming a combined unit which can be easily located without the need for special site considerations. For even larger battery systems or specialist battery installations, lower cost open or cladded racks can be provided.

PowerGem Pro Tower – Online Double Conversion UPS

Technical Specification

MODEL		PGPRO 6K (L)	PGPRO 10K (L)	PGPRO 10K (L)	PGPRO 15K (L)	PGPRO 20K (L)	PGPRO 30K (L)
Power Rating kVA / kW		6 / 4.8	10 / 8	10 / 8	15 / 12	20 / 16	30 / 24
INPUT							
Nominal Voltage		208 / 220 / 240 Vac (1Ph + N + PE)		3 x 400 Vac (3Ph + N + PE)			
Voltage Range		110 - 300 Vac @ 50% load 176 - 300 Vac @ 100% load		190 - 520 Vac (3-phase) at 50% load 305 - 478 Vac (3-phase) at 100% load *Models can be configured as single phase operation*			
Frequency Range		46 - 54 Hz or 56 - 64 Hz					
Power Factor		≥0.99 @ 100% Load					
OUTPUT							
Nominal Voltage		208 / 220 / 230 / 240 Vac					
AC Voltage Regulation (Battery Mode)		±1%					
Frequency Range (Synchronised Range)		46 - 54 Hz or 56 - 64 Hz					
Frequency Range (Battery Mode)		50 Hz ±0.1 Hz or 60 Hz ±0.1 Hz					
Power Factor		0.8 (optional 0.9 and unity)					
Crest Factor		3:1					
Harmonic Distortion (Linear Mode)		≤3% THD		≤2% THD			
Transfer Time		Zero					
Waveform		Pure Sinewave					
EFFICIENCY							
AC Mode		90.5%		90.5%	91%		91.3%
ECO Mode		96%					
Battery Mode		88%		86%	88%	87%	88%
BATTERY							
Battery Type		VRLA AGM Sealed Lead Acid Maintenance Free Batteries					
Battery Numbers (standard)		20		20 pcs (18-20 pcs adjustable)	20 pcs (18-20 pcs adjustable) x2 strings		20 pcs (18-20 pcs adjustable) x3 strings
Battery Numbers (long runtime)		Depending on capacity of external batteries					
Charging Current (max.) (standard)		1A			2A		4A
Charging Current (max.) (long runtime)		4A			8A		12A
GENERAL							
Operating Humidity		0 - 95% (non-condensing)					
Acoustic Noise Level		‹55 dB @ 1 metre		‹58 dB @ 1 metre	‹60 dB @ 1 metre		‹65 dB @ 1 metre
Management Software		Included					
Standard Model	Dimensions (mm) WxDxH	250 x 592 x 576		250 x 592 x 576	250 x 815 x 826		300 x 815 x 1000
	Net Weight (kgs)	81		83	164		234
Long runtime Model	Dimensions (mm) WxDxH	250 x 592 x 576		250 x 592 x 576	250 x 592 x 576		250 x 815 x 826
	Net Weight (kgs)	25		28	40		64

PowerGem Pro Rackmount – Online Double Conversion UPS

Technical Specification

MODEL		PGPRO 6KR (L)	PGPRO 10KR (L)	PGPRO 10KR (L)	PGPRO 15KR (L)	PGPRO 20KR (L)
Power Rating kVA / kW		6/ 4.8	10/ 8	10 / 8	15 / 12	20 / 16
INPUT						
Nominal Voltage		208 / 220 / 230 / 240 Vac (1Ph + N + PE)		3 x 400 Vac (3Ph + N + PE)		
Voltage Range		110 - 300 Vac @ 50% load 176 - 300 Vac @ 100% load		190 - 520 Vac (3-phase) at 50% load 305 - 478 Vac (3-phase) at 100% load		
Frequency Range		46 - 54 Hz or 56 - 64 Hz				
Power Factor		≥0.99 @ 100% Load				
OUTPUT						
Nominal Voltage		208 / 220 / 230 / 240 Vac				
AC Voltage Regulation (Battery Mode)		±1%				
Frequency Range (Synchronised Range)		46 - 54 Hz or 56 - 64 Hz				
Frequency Range (Battery Mode)		50 Hz ±0.1 Hz or 60 Hz ±0.1 Hz				
Power Factor		0.8 (optional 0.9 and unity)				
Crest Factor		3:1				
Harmonic Distortion (Linear Mode)		≤3% THD		≤2% THD		
Transfer Time		Zero				
Waveform		Pure Sinewave				
EFFICIENCY						
AC Mode		90.5%		90.5%	91%	
ECO Mode		96%				
Battery Mode		88%		86%	88%	
BATTERY						
Battery Type		VRLA AGM Sealed Lead Acid Maintenance Free Batteries				
Battery Numbers (standard)		20		20pcs (18 - 20 pcs adjustable)	20pcs (18 - 20 pcs adjustable) x2 strings	
Battery Numbers (long runtime)		Depending on capacity of external battery cabinet				
Charging Current (max.) (standard)		1A			2A	
Charging Current (max.) (long runtime)		4A				
GENERAL						
Operating Humidity		0 - 95% (non-condensing)				
Acoustic Noise Level		‹55 dB @ 1 metre		‹60 dB @ 1 metre	‹65 dB @ 1 metre	
Management Software		Included				
Standard Model	Dimensions (mm) WxDxH	UPS: 438 x 580 x 133 Battery Cab: 438 x 530 x 133		UPS: 438 x 668 x 133 Battery Cab: 438 x 530 x 133	UPS: 438 x 668 x 266 Battery Cab: 438 x 530 x 133	
	Net Weight (kgs)	UPS: 17 Battery Cab: 57		UPS: 22 Battery Cab: 63	UPS: 45 Battery Cab: 63 x 2 packs	
Long runtime Model	Dimensions (mm) WxDxH	UPS: 438 x 580 x 133		UPS: 438 x 668 x 133	UPS: 438 x 668 x 266	
	Net Weight (kgs)	17		22	45	

Accessories

Suitable for the Single Phase UPS Ranges
PowerGem Xtreme / PowerGem+ / PowerOn /PowerGem Pro

SIMPLE NETWORK MANAGEMENT PROTOCOL (SNMP) MODULES

SNMP cards are used for the management of UPS systems via a computer or local network. With a web based programme built into the SNMP, simply connecting the card to a network via its LAN port allows for easy monitoring of the UPS. SNMP cards can be used not only to monitor UPS parameters, but also allow user controlled testing, email alerts and sending of remote console commands to client systems to initiate automatic shutdowns. SNMP cards can be fitted internally on some UPS models or externally fitted via the UPS RS232 port.

RELAY CARDS

Relay communication cards provide contact closures for the remote monitoring of the UPS system. The dry-port interface card provides a selection of dry-contact relays. The dry-contact signals monitor select parameters of the UPS such as, UPS failure, bypass active, low battery, UPS on and utility failure. The dry-ports will then change their status depending on this alarm.

RAIL KITS

Rail kits are available for all rackmount UPS, a simple kit to ease installation into 19" cabinets and will allow the UPS to be supported without the requirement of a shelf.

EXTERNAL RACKMOUNT MAINTENANCE BYPASS SWITCHES

Suitable for 1kVA – 3kVA models

- **Provides continuous power to connected equipment during UPS maintenance**
- **Easy operation with simple rotary switch and indications**
- **Adjustable master-slave function**
- **Large number of sockets for extended usage**
- **Rack and tower designs to fit into a diverse working environment**
- **Simple plug-and-play connectivity**
- **Diverse socket selections: IEC, UK, Schuko and NEMA**

Suitable for PowerGem Pro 6kVA & 10kVA models

- **Easy operation with simple rotary switch and indications**
- **100% make-before-break to provide continuous power to connected equipment during UPS maintenance**
- **Automatic UPS protection design – auto transfer UPS to bypass when opening the maintenance bypass switch panel**
- **Easy operation with simple rotary switch**
- **Terminal block type**

The BPC Group

BPC is an international company operating for 20 years globally, with partners and distributors located around the world.

These regions include:

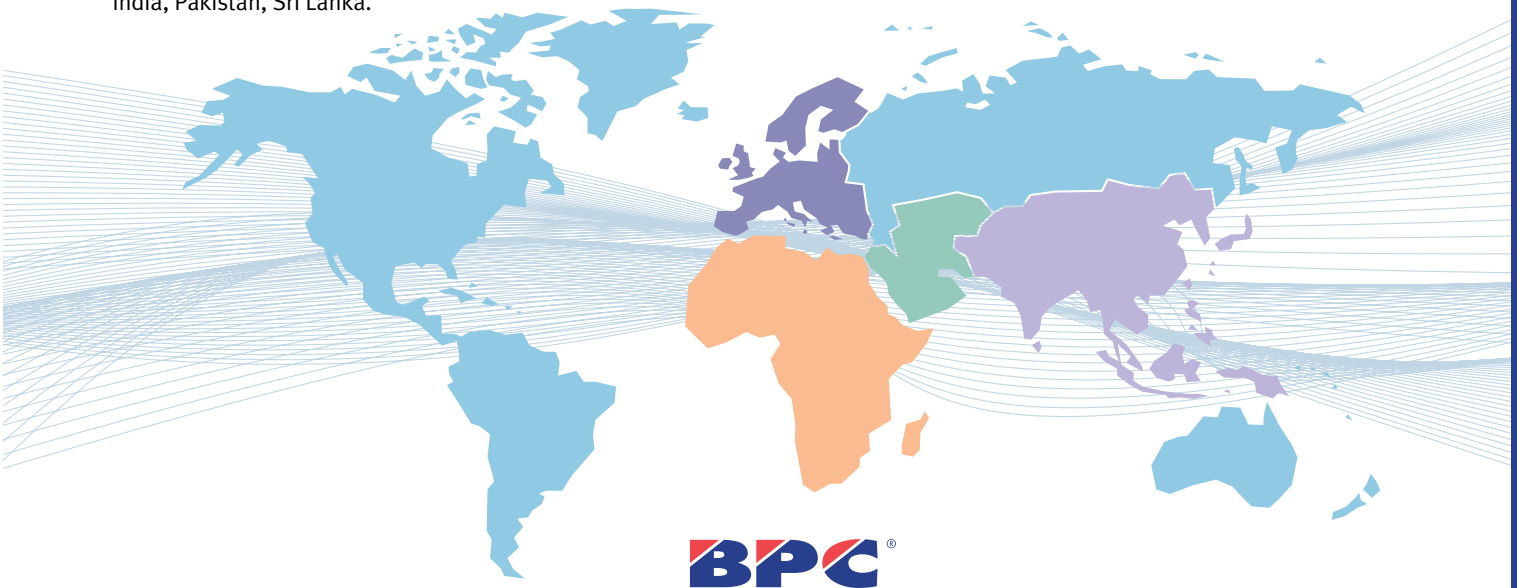
EUROPE
UK, France, Germany, Gibralta, Ireland, Netherlands, Malta, Norway, Portugal.

MIDDLE EAST
Bahrain, Jordan, Kuwait, KSA, Lebanon, Oman, Qatar, UAE, Yemen.

AFRICA
Burkina Faso, Democratic Republic of the Congo, Egypt, Ethiopia, Kenya, Ghana, Libya, Nigeria, Rwanda, Sierra Leone, Sudan, Tanzania, Uganda, Zambia.

FAR EAST & ASIA
India, Pakistan, Sri Lanka.

To ensure a high level of pre and post-sales support is offered, BPC work closely with distributors, providing key commercial and technical training whilst providing competitive costing structures tailored to specific region markets, ensuring the most suitable BPC products are offered. We pride ourselves on long standing relationships with our partners which is reflected in the ongoing support provided locally.



BPC ENERGY

The British Power Conversion Company

Authorised Distributor