

PowerGem™ Plus RT Series

Single Phase Input & Output – True Online Double Conversion UPS
1kVA – 10kVA

- » Sophisticated
- » Versatile
- » Green Concept Design



The BPC PowerGem Plus RT is a unique range of high density UPS Systems that can be installed whether on the floor in tower form or in rackmount cabinet configurations powering a wide range of applications.

The PowerGem is an ultra efficient system resulting in improved operational performance up to 97% in ECO mode, 92% in inverter mode and over 90% in battery mode, providing a much greener product with smaller battery and longer autonomy backup times.

The range is equipped with the latest digital signal processor (DSP) technology with versatile features demanded by IT managers enabling integration into all types of networking environments.

- » Data Centres
- » Financial Services
- » Healthcare
- » Networking
- » Telecommunications
- » Mission Critical

PowerGem Plus RT Features

RACK/TOWER CONFIGURATION

The PowerGem Plus RT range is extremely versatile and designed to have the flexibility to use as a floor standing tower type UPS or to be integrated into the client's 19" rack cabinet.

The enhanced programmable LCD display can be manually positioned to suit both modes of operation by simply removing and rotating the display panel.



ADVANCED FUNCTIONAL LCD DISPLAY

The PowerGem Plus RT DSP controlled UPS provides an intelligent high density system suitable for powering a wide range of devices both simply and accurately.

A precise backlit comprehensive LCD display with schematic operation status of the UPS, LED indicators and function keys allowing all the key parameters, alarms and indications to be shown.



ENVIRONMENTALLY FRIENDLY ENERGY SAVING

The intelligent microprocessor based control system allows for the very low power consumption offered by the interactive ECO mode which provides efficiencies as high as 97%. PowerGem Plus RT switches instantaneously to online double conversion operation automatically when the mains becomes unstable and fluctuates outside the normal frequency and voltage parameters.

- True online double conversion
- Digital Signal Processor (DSP) technology
- Wide input voltage (110V – 300V)
- Tower or Rackmount convertible design
- Unity output power factor (optional 0.9pf)
- Hot swappable battery design (optional for 6-10kVA)
- Intelligent self-diagnostics
- Pure Sinewave output
- Multiple communication ports
- Emergency Power Off (EPO) function
- Long runtime versions
- Automatic battery test function
- Configurable battery voltage (6-10kVA)
- ECO mode operation for energy saving
- Programmable frequency converter mode
- Scalable redundancy parallel ready (6-10kVA)
- Dust filter for hazardous environments

WIDE INPUT VOLTAGE

Part of the unique design of the PowerGem Plus RT is to improve the performance in extreme site conditions with a wide input voltage window, ranging from 110 volts to 300 volts, without the need for the system to transfer into Battery Mode.

HOT SWAPPABLE BATTERIES

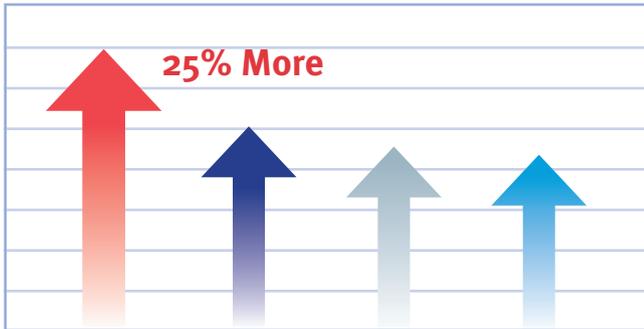
A key advantage of the PowerGem Plus RT range of UPS is hot swappable batteries as this feature allows the user to replace batteries during operation without interruption to the load.



PowerGem Plus RT Features

UNITY POWER FACTOR

The PowerGem Plus RT range adopts DSP and highly efficient electronic IGBT inverter technology providing one of the highest power density ratios in the UPS industry. Advanced inverter circuitry delivers unity power factor maximising power output.



PARALLEL READY N+X REDUNDANCY

The PowerGem Plus RT 6-10kVA models are able to be connected directly to the user's distribution system. Models can be used in simple parallel operation with up to 4 units, allowing scalability for increased power capacity and improved reliability due to the redundancy operation. The parallel system can be connected to a common battery if required.



PROGRAMMABLE FREQUENCY CONVERTER

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

CONFIGURABLE BATTERY VOLTAGE

Each 6-10kVA UPS within the range has the flexibility to configure battery voltages from a 20 block system to either 16 or 18 blocks depending on application and runtime requirements.

COMMUNICATION INTERFACE

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



LOW NOISE LEVEL

More often the PowerGem Plus RT range will be installed in an office workspace and the environment will be an important factor in the design. Therefore, by using modern high frequency technology the noise dissipation is reduced to less than 50dBA for smaller units.

LONG RUNTIME APPLICATIONS

For mission critical applications requiring longer runtimes additional matching battery cabinets can 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 business continuity requiring very long runtimes the PowerGem range offers larger built-in chargers which can be adjusted from the LCD control panel to provide faster recharge capability.



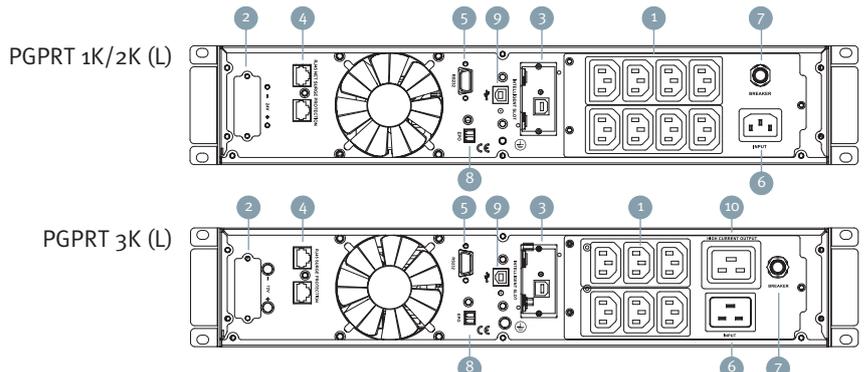
PowerGem Plus RT

Technical Specification for the 1-3kVA



| MODEL | PGPRT 1000 (L) | PGPRT 2000 (L) | PGPRT 3000 (L) |
|--------------------------------------|--|---|----------------|
| Power Rating VA / Watts | 1000VA / 1000W | 2000VA / 2000W | 3000VA / 3000W |
| INPUT | | | |
| Nominal Voltage | 200 / 208 / 220 / 230 / 240 Vac | | |
| Voltage Range | 110 - 300 Vac (load dependent) | | |
| Frequency Range | 40 - 70 Hz | | |
| Power Factor | >0.99 @ 100% Load | | |
| OUTPUT | | | |
| Nominal Voltage | >200 / 208 / 220 / 230 / 240 Vac | | |
| AC Voltage Regulation (Battery Mode) | ±1% | | |
| Frequency Range (Synchronised Range) | 47 - 53 Hz or 57 - 63 Hz | | |
| Frequency Range (Battery Mode) | 50/60 Hz ±0.1% Hz | | |
| Crest Factor | 3:1 | | |
| Harmonic Distortion (Linear Mode) | ≤3% THD | | |
| Transfer Time (AC to Battery) | Zero | | |
| Waveform | Pure Sinewave | | |
| EFFICIENCY | | | |
| AC Mode | >88% | >92% | >92% |
| ECO Mode | >95% | >97% | >97% |
| Battery Mode | >86% | >88% | >90% |
| BATTERY | | | |
| Battery Type | VRLA AGM Sealed Lead Acid Maintenance Free Batteries | | |
| Battery DC Voltage | 24 or 36 volts | 48 volts | 72 volts |
| Typical Recharge Time | 4 hours recover to 90% capacity | | |
| Charging Current (max.) | Standard Models | 1A | |
| | Long Runtime Models | 12A adjustable by LCD display | |
| GENERAL | | | |
| Operating Humidity | 20 - 90% RH @ 0 - 40°C (non-condensing) | | |
| Acoustic Noise Level | ≤50 dB @ 1 metre | | |
| Management Software | Included | | |
| Standard Model | Dimensions (mm) WxDxH | 438x325x88 (24vdc option) / 438x460x88 (36vdc option) | 438 x 460 x 88 |
| | Net Weight (kgs) | 11.3 | 19.1 |
| Long Runtime Model | Dimensions (mm) WxDxH | 438 x 325 x 88 | 438 x 435 x 88 |
| | Net Weight (kgs) | 5.6 | 8.3 |

- 1 Output Receptacles (10A)
- 2 Battery Terminal
- 3 SNMP Intelligent Slot
- 4 Network/Fax/Modem Surge Protection
- 5 RS-232 Communication Port
- 6 AC Input
- 7 Input Circuit Breaker
- 8 EPO
- 9 USB Communication Port
- 10 Output Receptacle (16A)



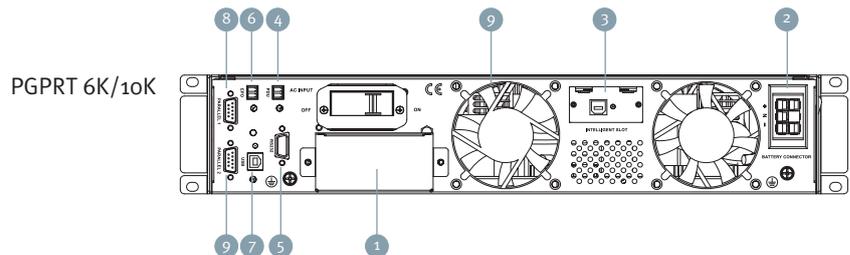


PowerGem Plus RT

Technical Specification for the 6-10kVA

| MODEL | PGPRT 6000 | PGPRT 10K |
|--------------------------------------|--|-----------------|
| Power Rating VA / Watts | 6kVA / 6kW | 10kVA / 10kW |
| INPUT | | |
| Nominal Voltage | 220 / 230 / 240 Vac | |
| Voltage Range | 120 - 276 Vac (load dependent) | |
| Frequency Range | 42 - 55 Hz at 50 Hz / 54 - 66 Hz at 60 Hz (auto sensing) | |
| Power Factor | >0.99 @ 100% Load | |
| OUTPUT | | |
| Nominal Voltage | 220 / 230 / 240 Vac | |
| AC Voltage Regulation (Battery Mode) | ±1% | |
| Frequency Range (Synchronised Range) | 45 - 65 Hz (auto select) | |
| Frequency Range (Battery Mode) | 50/60 Hz ±0.1 Hz | |
| Crest Factor | 3:1 | |
| Harmonic Distortion (Linear Mode) | ≤3% THD | |
| Transfer Time (AC to Battery) | Zero | |
| Waveform | Pure Sinewave | |
| EFFICIENCY | | |
| AC Mode | >92.5% | |
| ECO Mode | >97.3% | |
| Battery Mode | >89% | >88% |
| BATTERY | | |
| Battery Type | VRLA AGM Sealed Lead Acid Maintenance Free Batteries | |
| Battery DC Voltage | External matching battery cabinet – 192/216/240 volts | |
| Typical Recharge Time | 4 hours recover to 90% capacity | |
| Charging Current (max.) | 10A adjustable by LCD display | |
| GENERAL | | |
| Operating Humidity | 20 - 90% RH @ 0 - 40°C (non-condensing) | |
| Acoustic Noise Level | <55 dB @ 1 metre | |
| Management Software | Included | |
| UPS Module | Dimensions (mm) WxDxH | 438 x 725 x 88 |
| | Net Weight (kgs) | 15 |
| BCRT20No09 Battery Cab. | Dimensions (mm) WxDxH | 438 x 585 x 133 |
| | Net Weight (kgs) | 64 |

- 1 Input and Output Terminals
- 2 Battery Terminal
- 3 SNMP Intelligent Slot
- 4 PDU Communication
- 5 RS232 Communication Port
- 6 EPO
- 7 USB Communication Port
- 8 Parallel Port 1
- 9 Parallel Port 2



The BPC Group

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

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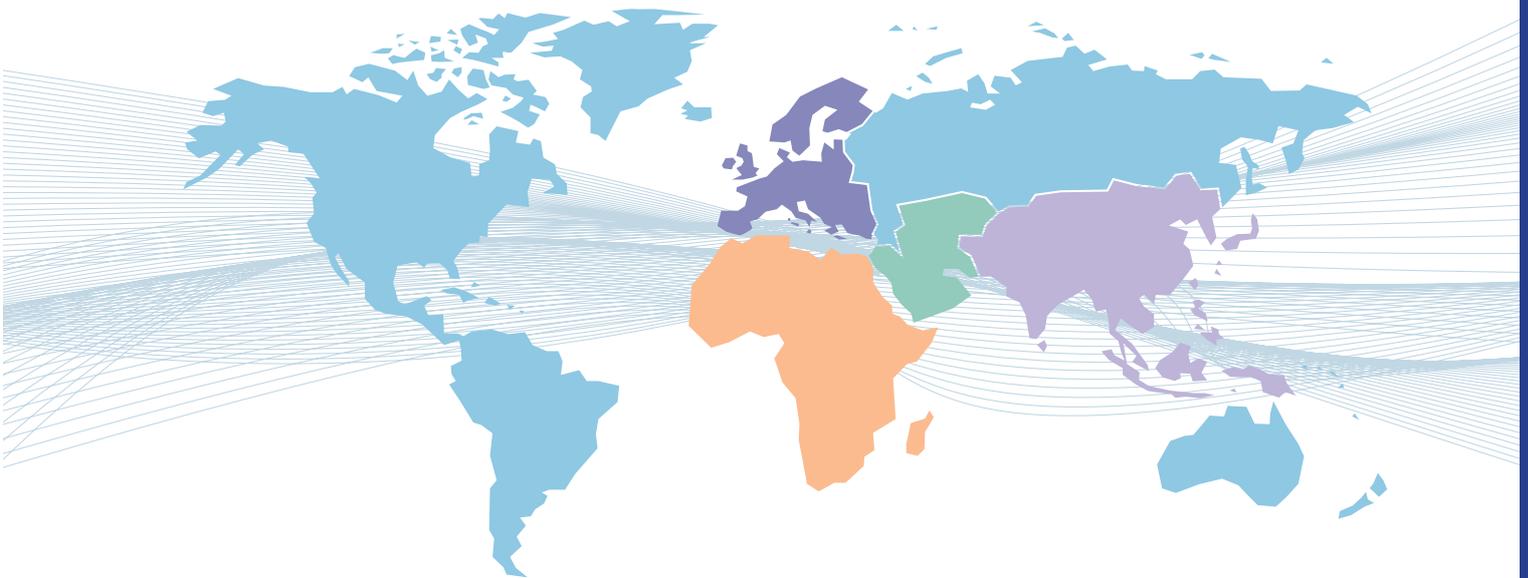
AFRICA

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.



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