

## PowerPrime™ Series

Three Phase Input and Three Phase Output  
True on-line Double Conversion UPS  
80kVA - 200kVA

- » Sophisticated
- » Ultra-Reliable
- » Effortless Maintenance
- » Intelligent
- » User Friendly

VFI



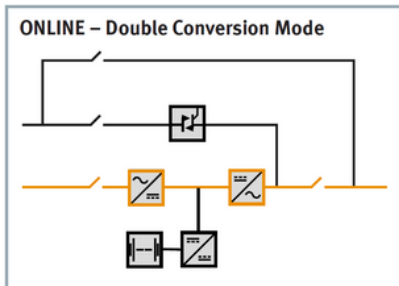
The PowerPrime 80kVA to 200kVA range is the ultimate in UPS design based on the tower standalone concept. Reliability, flexibility, and effortless maintenance is achieved with swappable power modules. Full range of options and accessories to meet the demands of sophisticated network environments. Ideally suited for mission critical applications such as servers, network and telecommunication equipment.

The PowerPrime range state of the art technology has been combined with an advanced 7 inch colour screen providing line operational display and analysis of the UPS performance. Accurate information on the input and load output condition provides maximum network protection. Critical load is continuously supplied with a filtered and stabilised waveform to the highest standards.

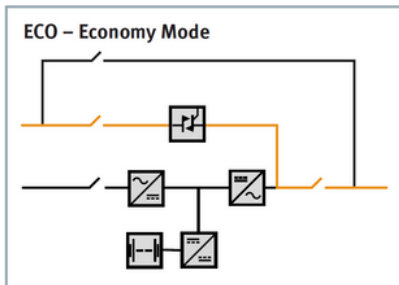
- » Server Rooms
- » Financial Services
- » Healthcare
- » IT Solutions
- » Telecommunications

## PowerPrime Features

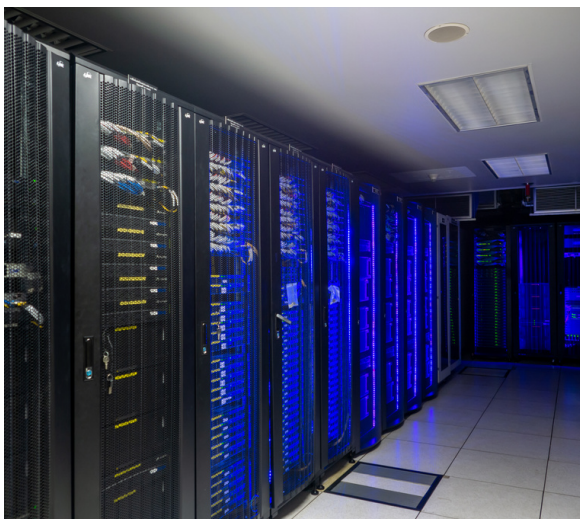
### MODES OF ADVANCED OPERATION



- UPS output PF=1, THDi <2% linear
- Efficiency more than 95.5%
- High quality and reliability with 3 level topology



- UPS is running in static bypass mode
- Efficiency up to 99%

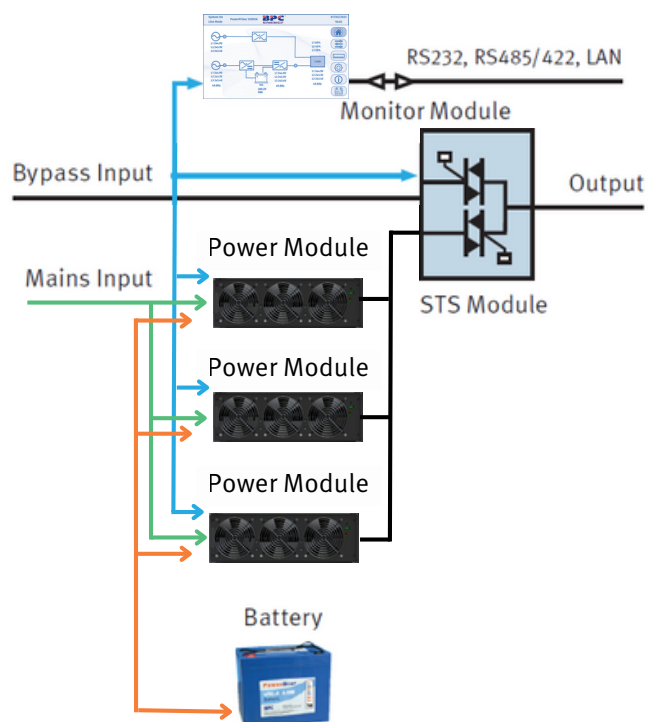


### TOWER CONCEPT FOR EASE OF MAINTENANCE

The PowerPrime concept is based on the conventional tower UPS design which achieves excellent affordability.

The PowerPrime technology has the majority of power components in modular format to provide enhanced reliability and low MTBF. Front access and swappable capability provides ease of maintenance.

- True online double conversion
- 3 level IGBT performance
- Advanced touch screen display
- High AC/AC efficiency
- Unity output power factor
- Ease of installation and maintenance
- Dual feed input
- Compact design and excellent power density
- Wide input voltage (110V to 300V)
- Parallelable up to 4 units as standard
- Smart battery management and adjustable voltages
- Power walk-in function
- Improved noise reduction
- Conformal coating & built-in dust filters for harsh environments
- Digital Signal Processing (DSP) technology
- ECO mode operation for energy saving
- Intelligent event history / 500 alarm logs
- Multiple communication ports
- Matching battery cabinets



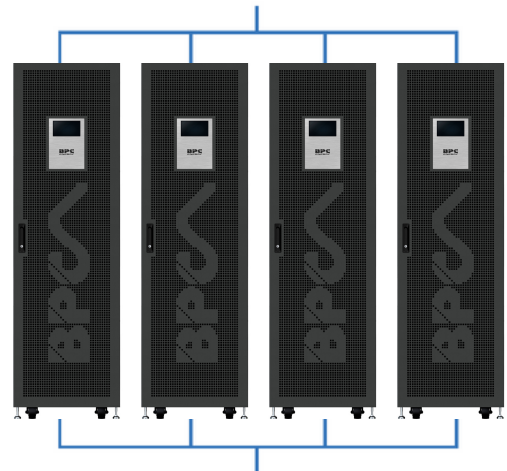
## PowerPrime Features

### LONGER RUNTIME APPLICATIONS

For mission critical applications requiring longer runtimes or higher specification batteries, PowerPrime UPS employ an internal intelligent charging system with up to 12 Amps configured by the front touch screen. Additional matching battery cabinets can easily be added and have been designed both technically and aesthetically to complement the UPS, forming a combined unit which can be easily positioned.

### PARALLEL READY - FLEXIBILITY UP TO 720KW

The BPC philosophy is both simple and elegant with each model provided parallel ready. The UPS can be connected together without any requirement to install further control circuits into the UPS system. BPC would always recommend installing one of our parallel switch panels to provide correct cable protection and aid all ongoing maintenance. 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.



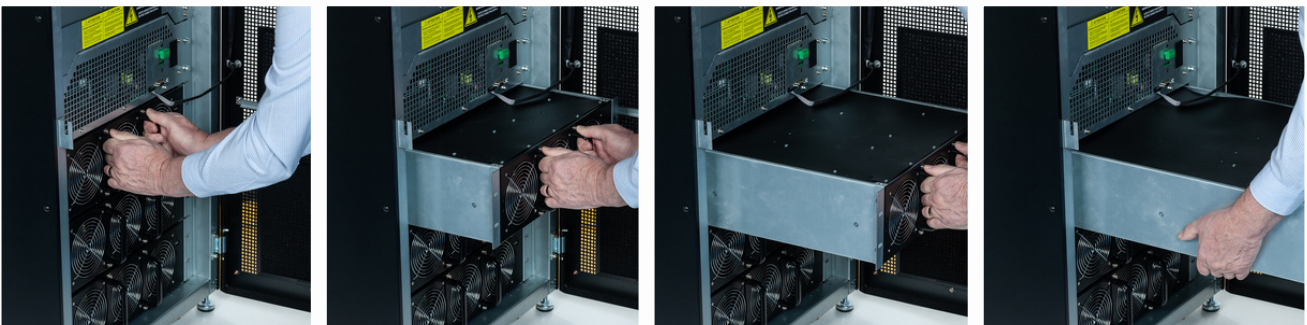
### FAST REPLACEMENT OF RECTIFIER/INVERTER MODULE PROVIDES VERY LOW MTTR

The BPC PowerPrime UPS have a lockable cabinet and all switches, user interface, power modules and LCD information are easily accessible.

Pluggable power modules are fully front access, operating a swap technology where each power modules is automatically synchronised to the load sharing of the system. The design of the system allows for the BPC Service team to provide maintenance and service of the UPS ensuring the system has the highest uptime.



\* Front access power modules for ease of maintenance of 80kVA/100kVA & 120kVa models

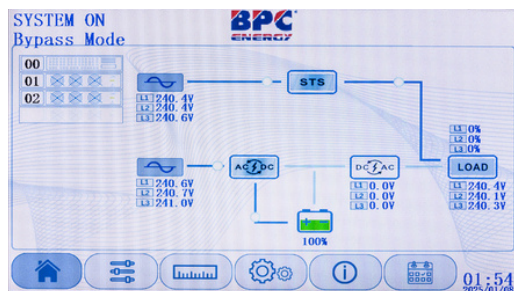


\* Front access power modules for ease of maintenance of 180kVA & 200kVa models

## PowerPrime Features

### ADVANCED TOUCH SCREEN WITH LCD DISPLAY

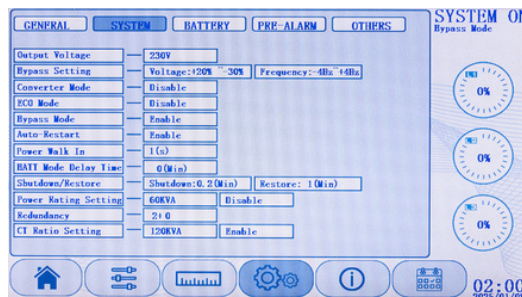
PowerPrime UPS have an advanced 7 inch colour touch screen providing precise LCD displays with real time mimic status and parameter readings via the intelligent Digital Signal Processor (DSP) controller. Touch any of the control, measure, setting, information or data log sub menu icons to enter into various sub screens.



The PowerPrime main screen provides live operational display of the mains supply in both the Dual Feed Input and load output conditions with full graphical representation through five icons with touch control so that the sub menus are easily accessible.



All PowerPrime UPS include the latest DSP software technology to provide dynamic self testing which is an effective function that can be executed manually on restart to determine the UPS system is fully operational and that the site conditions are acceptable.

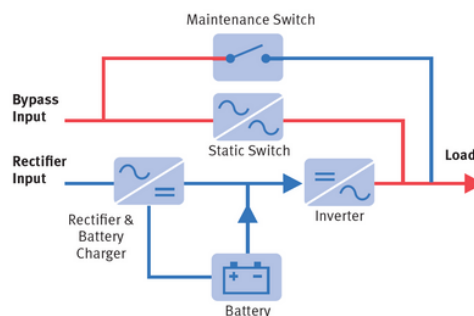


The display provides extensive diagnostics, controls and settings with simple touch screen pages allowing access to a variety of information and data. Measuring real parameters including AC input and output voltage, power conditions in VA/Watts/Power Factor, frequency, battery voltage, load levels, battery backup time and modes of operation.

### DUAL FEED INPUT

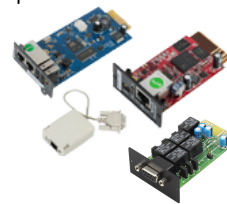
The PowerPrime Dual Feed Input design increases the levels of reliability and availability of the UPS system. Dependability is ensured by providing a secondary path for the bypass supply to eliminate the risk of any problems with the incoming rectifier input. This superior protection allows the load to be supplied directly from the mains power source.

Dual Input System Principal Diagram



### MULTIPLE COMMUNICATION OPTIONS

The PowerPrime communication module has a built-in intelligent internal slot for SNMP communications, a second extra Comms slot and dry contact cards to allow for additional local or remote monitoring of the UPS system. USB/RS232/RS485/dry ports/TCP/IP adaptor are provided as standard to allow further communication with UPS from building management systems and on-site maintenance personnel.



### IMPROVED NOISE REDUCTION

The PowerPrime tower design is ergonomically constructed to keep overall noise attenuation down to minimal levels which is enhanced by a smart multi-speed fan control design/concept to improve noise reduction even further at lower capacity loads.

### WIDE INPUT VOLTAGE

Part of the unique design of the PowerPrime is to improve the performance in extreme site conditions with a wide input voltage window, ranging from 110 Volts up to 300 Volts, without the need for the system to transfer into Battery Mode, thus not only improving the efficiency of the system, but also maximising the life of the battery.

## PowerPrime Features

### FREQUENCY CONVERTERS

The PowerPrime systems can be used for converting utility mains power to different frequencies such as 50Hz or 60Hz, and voltages to run your critical equipment. They are designed with Power Factor correction to reduce input current and harmonic distortion using DSP/IGBT technology to achieve high quality output.

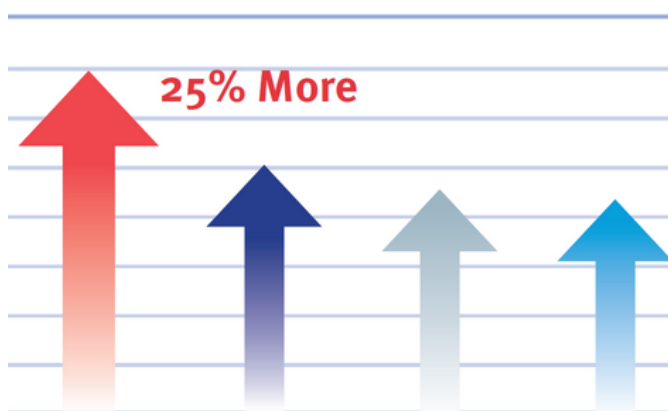
### CONFIGURABLE BATTERY VOLTAGE

The PowerPrime models are a series of uninterruptible power supply (UPS) systems that are designed to provide reliable and efficient power protection for a wide range of applications. One of the key features of this model is its flexibility in terms of battery configuration.

The PowerPrime models have the flexibility to be configured with variation from 32 (16+16) pcs to 40 (20+20) pcs of external batteries, dependant on applications and runtime requirements. When parallel redundant UPS designs are required, you also have the option of a consider common battery design.

### COMPACT DESIGN

The PowerPrime systems offers one of the smallest footprints available on the market, providing exceptional power density of 278KW/m<sup>3</sup> at 200kVA/200kW capacity for the ever space conscious IT manager.



The PowerPrime system provides 25% more energy density than similar products.



### UNITY POWER FACTOR

The PowerPrime 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.

### LONGER RUNTIMES

For mission critical applications requiring longer runtimes or higher specification batteries, PowerPrime UPS employs an internal intelligent charging system with up to 54 Amps configured by the front touch screen. The larger internal charger allows for longer runtimes. Additional matching battery cabinets can easily be added and have been designed both technically and aesthetically to complement the UPS, forming a combined unit which can be easily positioned.

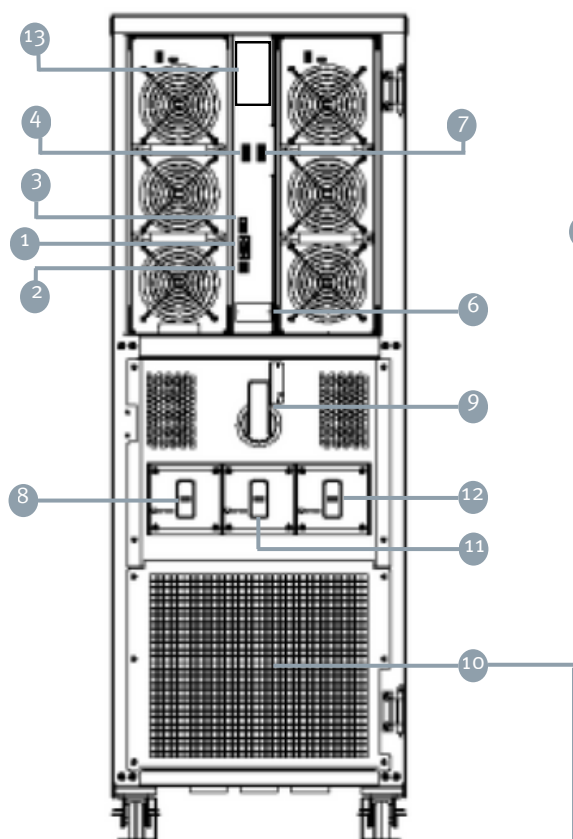
### SMART BATTERY MANAGEMENT

Intelligent battery management combined with exceptional 94.5% DC/AC inverter efficiency means that PowerPrime battery sizing is optimised and greater runtimes are achieved. Maximum battery care is maintained by a three level charging system to achieve the best performance and operating life possible.

### FULL GALVANIC ISOLATION (optional)

The PowerPrime range offers integrated full galvanic isolation from an isolation transformer which is housed inside the UPS cabinet. It provides galvanic isolation for safety, protecting against electric shock, reducing electrical noise, and enabling power transfer between circuits. Typically for medical and other critical applications.

## PowerPrime Features for 80kVA - 120kVA models



80kVA, 100kVA & 120kVA Models



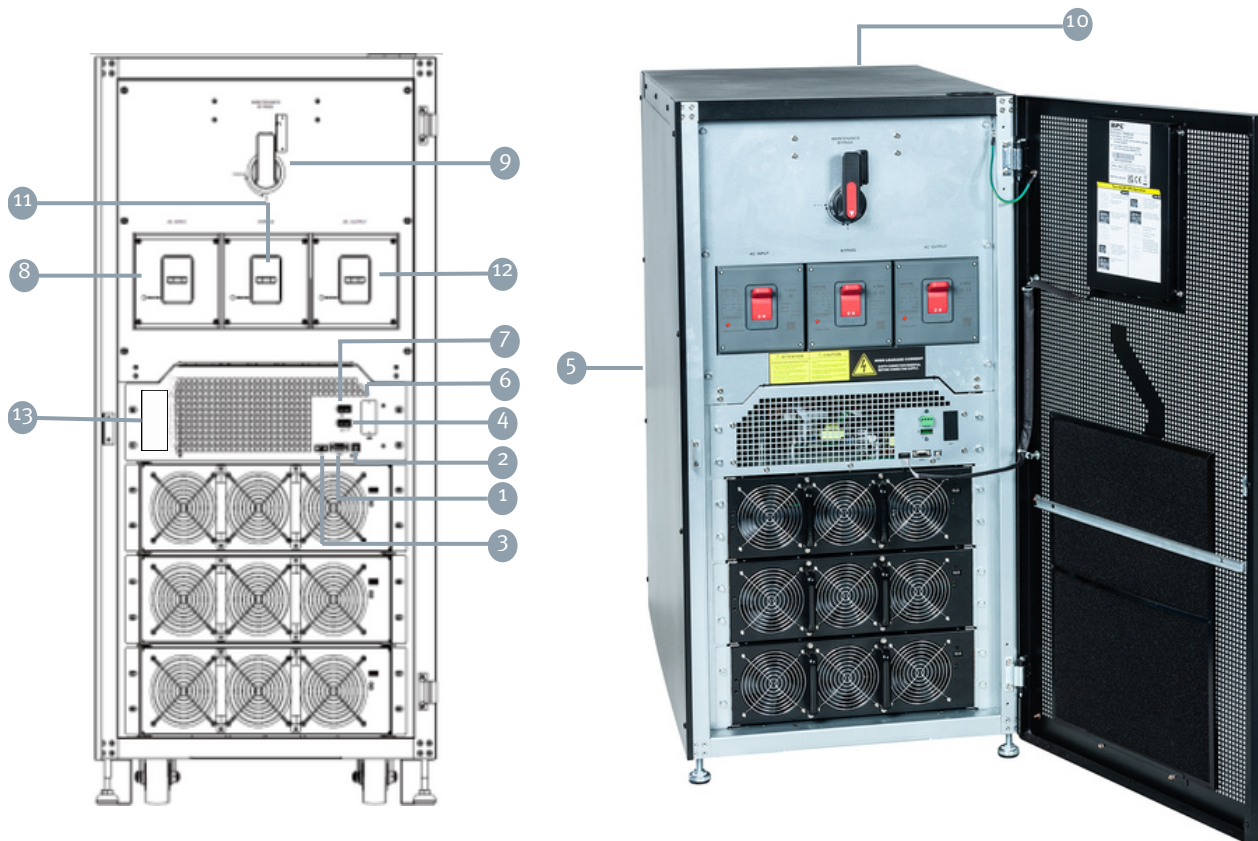
- 1 RS232 communication port
- 2 USB communication port
- 3 LCD display port
- 4 Emergency power off connector (EPO connector)
- 5 Parallel port (rear panel)
- 6 Intelligent slot SNMP
- 7 Temperature sensor input
- 8 Line input circuit breaker
- 9 Maintenance bypass switch
- 10 Input/output terminals
- 11 Bypass input circuit breaker
- 12 Output switch
- 13 Extra comms slot

### EASY INSTALLATION (front access)



With fully configurable bus bar terminals, the PowerPrime range is easy and convenient to install, with built-in mains and bypass line connections made simple. Systems have castor wheels for improved mobility, and ease of maintenance depending on the electrical installation.

## PowerPrime Features for 180kVA - 200kVA models



180kVA - 200kVA Models

### EASY INSTALLATION (rear access)



- 1 RS232 communication port
- 2 USB communication port
- 3 LCD display port
- 4 Emergency power off connector (EPO connector)
- 5 Parallel port (rear panel)
- 6 Intelligent slot SNMP
- 7 Temperature sensor input
- 8 Line input circuit breaker
- 9 Maintenance bypass switch
- 10 Input/output terminals
- 11 Bypass input circuit breaker
- 12 Output switch
- 13 Extra comms slot

With fully configurable bus bar terminals, the PowerPrime range is easy and convenient to install, with built-in mains and bypass line connections made simple. Systems have castor wheels for improved mobility, and ease of maintenance depending on the electrical installation.

## PowerPrime - Online Double Conversion UPS

### Three Phase Input and Three Phase Output

#### Technical Specification



| MODEL                             | PPRIME 380                                                                        | PPRIME 3100    | PPRIME 3120    | PPRIME 3180       | PPRIME 3200    |
|-----------------------------------|-----------------------------------------------------------------------------------|----------------|----------------|-------------------|----------------|
| Power Rating kVA / Watts          | 80kVA/80kW                                                                        | 100kVA / 100kW | 120kVA / 120kW | 180kVA / 180kW    | 200kVA / 200kW |
| INPUT                             |                                                                                   |                |                |                   |                |
| Nominal Voltage                   | 380 / 400 / 415 VAC (3PH+N)                                                       |                |                |                   |                |
| Voltage Range                     | 110-300VAC @ 50% load / 184-276VAC @ 100% load                                    |                |                |                   |                |
| Frequency Range                   | 40Hz - 70Hz                                                                       |                |                |                   |                |
| Phase                             | 3 phase with neutral                                                              |                |                |                   |                |
| Power Factor                      | 0.99 @ 100% load, 0.97 @ 50% load                                                 |                |                |                   |                |
| OUTPUT                            |                                                                                   |                |                |                   |                |
| Phase                             | 3 phase with neutral                                                              |                |                |                   |                |
| Nominal Output                    | 380 / 400 / 415 VAC (3PH+N)                                                       |                |                |                   |                |
| Voltage Regulation (Steady State) | ≤ ±1% typical (balanced load)<br>≤ ±2% typical (unbalanced load)                  |                |                |                   |                |
| Nominal Frequency                 | 50Hz - 60Hz                                                                       |                |                |                   |                |
| Frequency Range                   | 46Hz - 54Hz or 56Hz - 64Hz                                                        |                |                |                   |                |
| Overload                          | ≤ 110% for 1 hour, 111 - 125% for 10 mins, 126-150% for 1 min and >150% for 200ms |                |                |                   |                |
| Harmonic Distortion               | ≤ 2% THD (linear load): ≤ 4% THD (non-linear load)                                |                |                |                   |                |
| Crest Factor                      | 3 : 1                                                                             |                |                |                   |                |
| EFFICIENCY                        |                                                                                   |                |                |                   |                |
| AC Mode                           | 95.5%                                                                             |                |                |                   |                |
| ECO Mode                          | 98.5%                                                                             |                |                |                   |                |
| Battery Mode                      | 94.5%                                                                             |                |                |                   |                |
| BATTERY                           |                                                                                   |                |                |                   |                |
| Battery Type                      | VRLA AGM Sealed Lead Acid Maintenance Free Batteries                              |                |                |                   |                |
| Battery Numbers                   | 32 (±16) - 40 (±20) pcs external                                                  |                |                |                   |                |
| Recharge Time                     | Dependant on the battery capacity                                                 |                |                |                   |                |
| Charging Current (max.)           | 24A                                                                               | 24A            | 36A            | 54A               | 54A            |
| Charging Voltage                  | Depending on block number configuration                                           |                |                |                   |                |
| GENERAL                           |                                                                                   |                |                |                   |                |
| Operating Temperature             | 0-40°C                                                                            |                |                |                   |                |
| Operating Humidity                | <90% non-condensing                                                               |                |                |                   |                |
| Operating Altitude                | <1000m for nominal power                                                          |                |                |                   |                |
| Acoustic Noise Level              | Max. 75dB @ 1 metre                                                               |                |                |                   |                |
| Protection Class                  | IP20 standard (optional IP31)                                                     |                |                |                   |                |
| Smart RS232 or USB                | Supports Windows 2000/2003/XP/Vista/2008/7/8/10/11, Linux and MAC                 |                |                |                   |                |
| Dimensions (mm) WxDxH             | 430 x 1000 x 1200                                                                 |                |                | 600 x 1000 x 1200 |                |
| Net Weight (kgs)                  | 125                                                                               | 169            | 169            | 249               | 249            |

## The BPC Group

BPC is an international company operating for over 27 years globally, with partners and distributors located around the world.

These regions include:

### EUROPE

UK, France, Germany, Gibraltar, Ireland, Netherlands, Malta, Norway, Portugal.

### MIDDLE EAST

Bahrain, Georgia, Iraq, Jordan, Kuwait, KSA, Lebanon, Oman, Qatar, Syria, Turkey, UAE, Yemen.

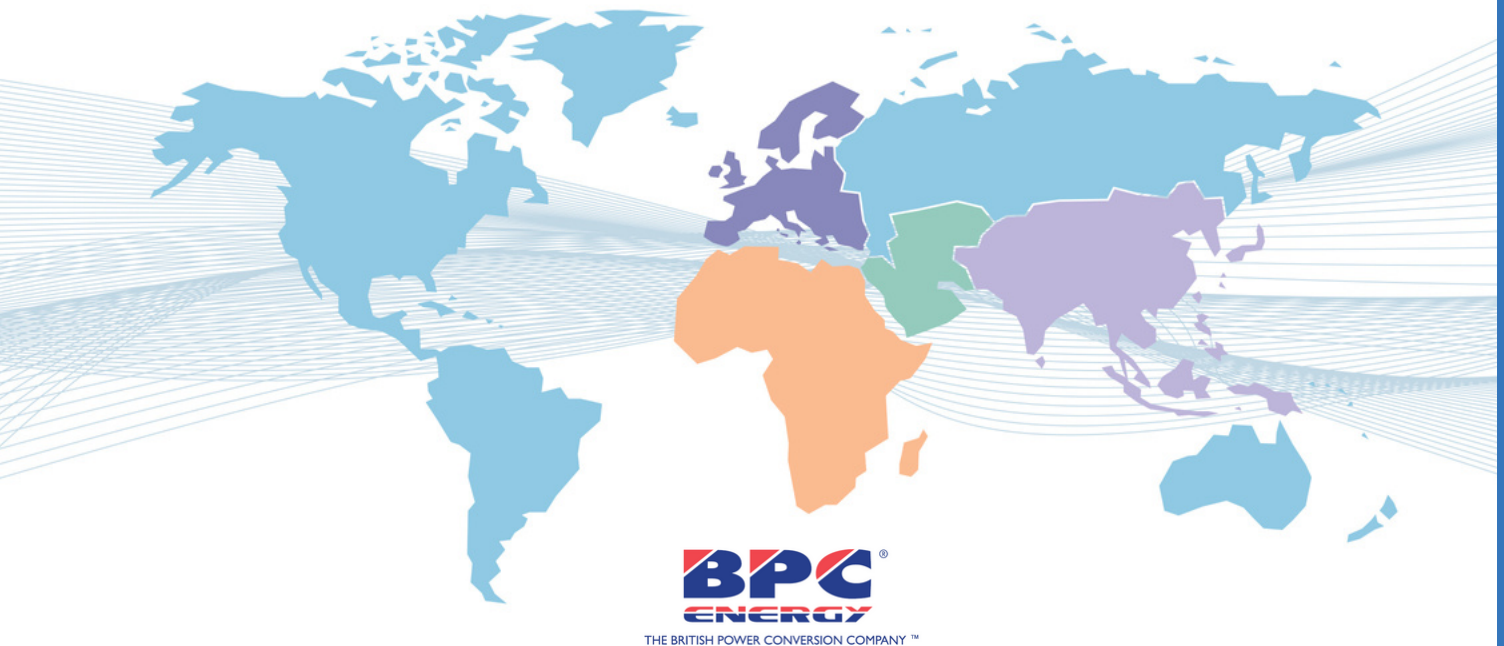
### AFRICA

Algeria, Botswana, Burkina Faso, Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, Kenya, Libya, Mozambique, Nigeria, Rwanda, Sierra Leone, South Africa, Sudan, Tanzania, Uganda, Zambia.

### FAR EAST & ASIA

India, Pakistan, Sri Lanka, Indonesia.

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.



Authorised Distributor