

PowerPrime™ Series

True on-line Double Conversion UPS

10kVA – 30kVA

» Sophisticated

» Reliable

» Intelligent

The PowerPrime 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 PowerPrime 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.



VFI

» Server Rooms

» Financial Services

» Healthcare

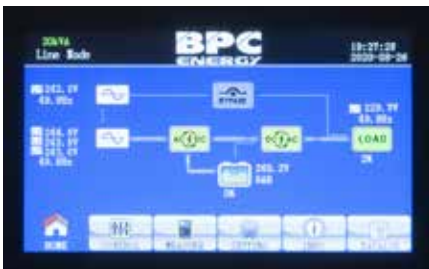
» IT Solutions

» Telecommunications

PowerPrime Features

ADVANCED TOUCH SCREEN WITH LCD DISPLAY

PowerPrime UPS have an advanced colour touch 5 inch screen providing precise LCD displays with real time mimic status and parameter readings via the intelligent Digital Signal Processor (DSP) controller. Touch either of the control, measure, setting, information or data log sub menu icons to enter into various sub screens.



The PowerPrime main screen can provide live operational display of the mains supply in both the Dual Feed Input and load output conditions with full graphical appreciation 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.

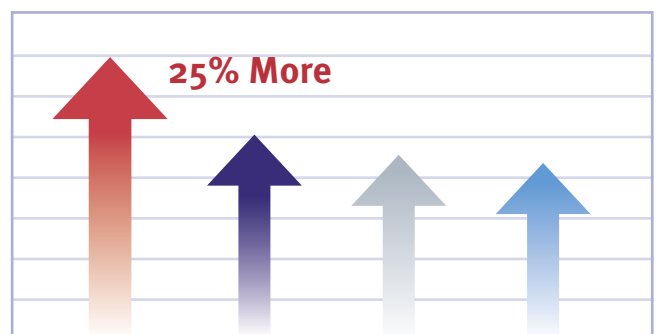


The panel provides extensive diagnostics, controls and settings with simple touch screen pages allowing access to a variety of information and data. Measuring real parameters including AC input and output voltage, power conditions in VA/Watts/Power Factor, frequency, battery voltage, load levels, battery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

- **True On Line Double Conversion**
- **1/1, 1/3, 3/3 configuration depending on model**
- **Advanced touch screen display**
- **High AC/AC efficiency up to 96.6%**
- **Intelligent event history / 500 alarm logs**
- **Unity output power factor**
- **Wide input voltage (100V 300V)**
- **Smart battery management**
- **Larger internal charger for long runtimes**
- **Parallelable up to 4 units as standard**
- **Standard dual feed configuration**
- **Adjustable internal battery voltage**
- **Digital signal (DSP) technology**
- **Multiple communication ports**
- **ECO mode operation for energy saving**
- **Matching battery cabinets**

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.



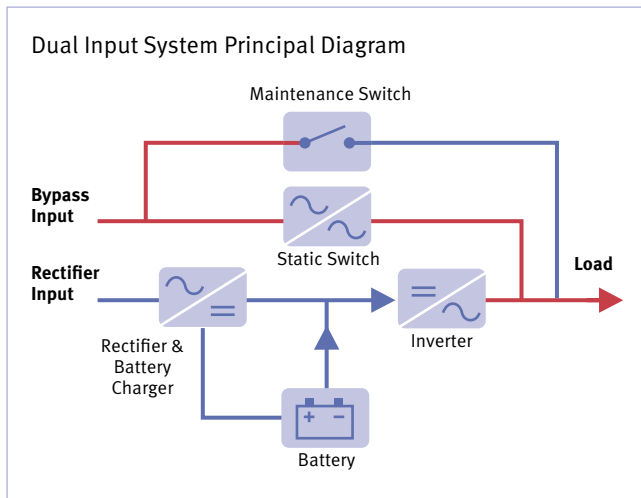
ENVIRONMENTALLY FRIENDLY ENERGY SAVING

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 99%. PowerPrime switches instantaneously to online double conversion operation automatically when the mains becomes unstable and fluctuates outside the normal frequency and voltage parameters.

PowerPrime Features

DUAL FEED INPUT

The PowerPrime Dual Feed Input design increases the levels of reliability and availability of the UPS system which is more commonly found in larger systems. Dependability is ensured by providing from the same source 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.



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.



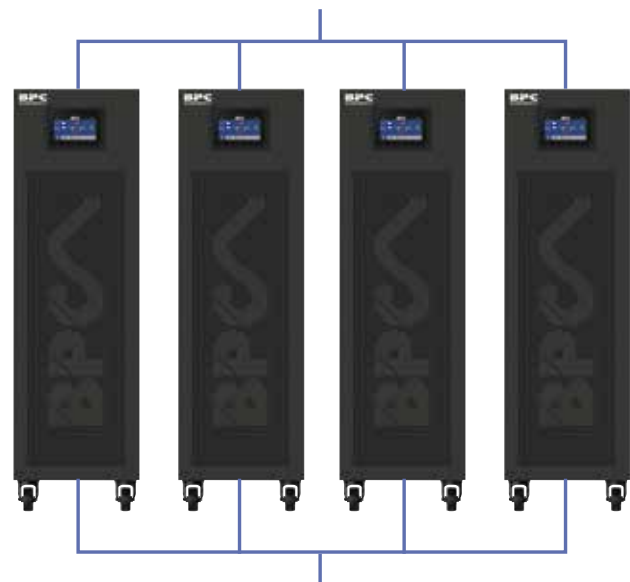
*Product may differ from image

MULTIPLE COMMUNICATION OPTIONS

The USB communication port can be used to locally monitor the UPS system. Internal slot is provided for SNMP communication. 8 output dry ports and 6 input dry ports are provided as standard to allow further communication with UPS.

PARALLEL READY

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.



EXTERNAL MAINTENANCE BYPASS SWITCH CONNECTION

The PowerPrime system has an easy connection port for direct interface to an EMBS (External Maintenance Bypass Switch). This connection allows a fast communication with the internal static switch should the EMBS be closed when the UPS is operating on inverter. The EMBS connection provides security against the external switchgear being operated incorrectly. This feature helps to protect the UPS during all operations.

INPUT CONFIGURATION

The PowerPrime 10kVA and 20kVA single phase output models have configurable input terminal connections and is provided with multifunctional jumpers to allow either single phase or three phase input connections. All PowerPrime models are fitted with large connection terminals and secure gland plates to allow secure cable connection to the UPS.

PowerPrime Features

SMART BATTERY MANAGEMENT

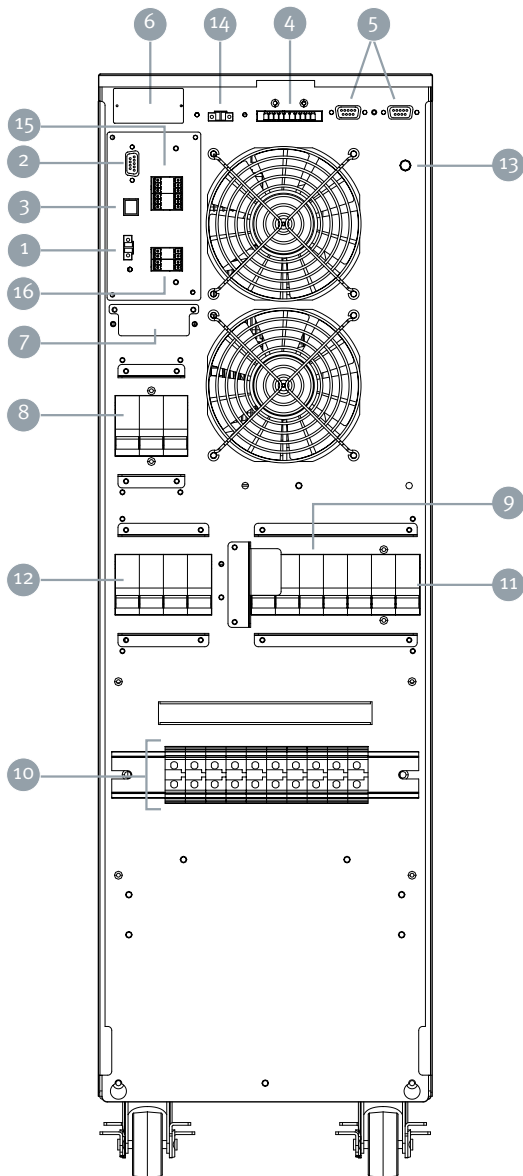
Intelligent battery management combined with exceptional 95.5% DC/AC inverter efficiency means that PowerPrime battery sizing is optimised and greater runtimes are achieved. Maximum battery care is maintained by a three level charging system to achieve the best performance and operating life possible. Unique self learning function predicts more accurate backup autonomy and improves the information for the user.

COMPACT DESIGN

The PowerPrime system offers one of the smallest footprints available on the market, providing exceptional power density of 122KW/m³ at 30kVA/30kW capacity with battery in one cabinet, for the ever space conscious IT manager.

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.



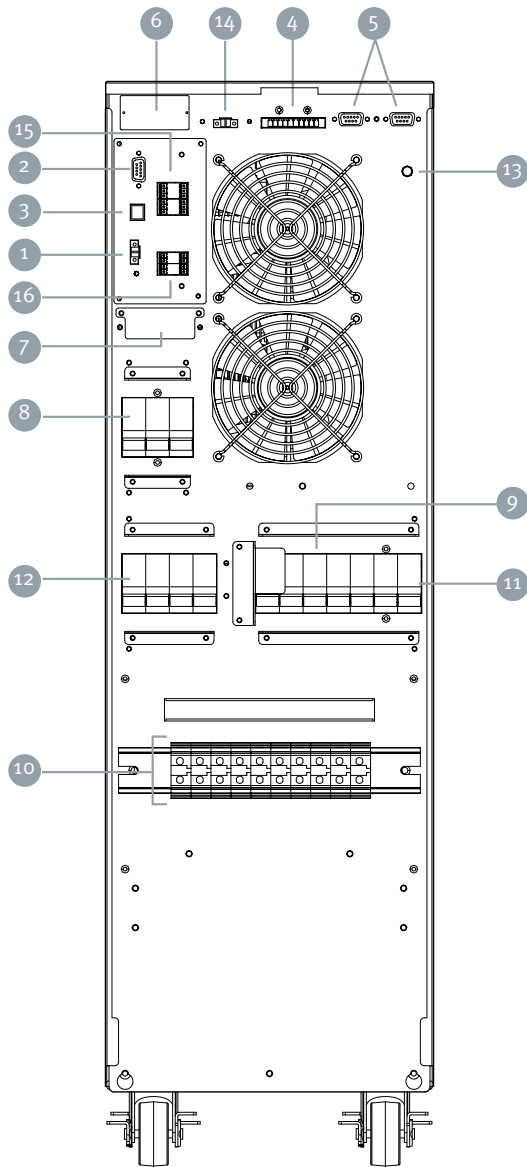
- 1 Emergency power off connector (EPO connector)
- 2 RS 232 communication port
- 3 USB communication port
- 4 Parallel share current port
- 5 Parallel port
- 6 Intelligent slot SNMP or DRY port
- 7 External battery connector
- 8 Line input circuit breaker
- 9 Maintenance bypass switch
- 10 Input/Output terminals
- 11 Bypass input circuit breaker
- 12 Output Switch
- 13 Service start
- 14 External Maintenance Bypass Switch connector (EMBS)
- 15 Input DRY port terminals
- 16 Output DRY port terminals

CONFIGURABLE BATTERY VOLTAGE

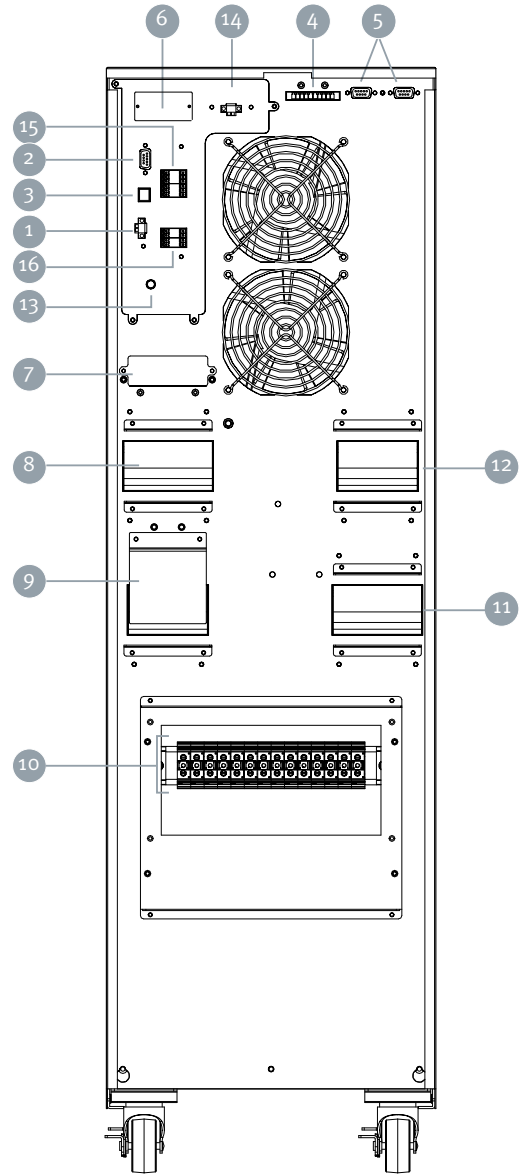
The 20kVA single phase output version within the range has the flexibility to configure battery voltages from 40 block +/- 20 to either +/-16 or +/-18 blocks depending on application and runtime requirements.

Single Phase Output 10kVA-20kVA

PowerPrime Features



Three Phase Output 10kVA-20kVA



Three Phase Output 30kVA

- 1 Emergency power off connector (EPO connector)
- 2 RS 232 communication port
- 3 USB communication port
- 4 Parallel share current port
- 5 Parallel port
- 6 Intelligent slot SNMP or DRY port
- 7 External battery connector
- 8 Line input circuit breaker

- 9 Maintenance bypass switch
- 10 Input/Output terminals
- 11 Bypass input circuit breaker
- 12 Output Switch
- 13 Service start
- 14 External Maintenance Bypass Switch connector (EMBS)
- 15 Input DRY port terminals
- 16 Output DRY port terminals



PowerPrime - Online Double Conversion UPS

Single Phase Input and Output – Technical Specification

MODEL	PPRIME 10k	PPRIME 20k
Power Rating kVA / Watts	10kVA / 10kW	20kVA / 20kW
INPUT		
Nominal Voltage	208*/220/230/240VAC (1PH+N+PE) or 380/400/415VAC (3PH+N+PE)	
Voltage Range	Low Line	110 VAC (PH+N) ±3% at 50% load 176 VAC (PH+N) ±3% at 100% load
	High Line	300 VAC (PH+N) ±3% at 50% load 276 VAC (PH+N) ±3% at 100% load
Frequency Range	46-54Hz at 50Hz / 56-64Hz at 60Hz (auto sensing)	
Phase	3 Phase with Neutral or 1 Phase with Neutral (Single or Dual Input)	
Power Factor	≥ 0.99 at 100% Load	
OUTPUT		
Phase	1 Phase with Neutral	
Nominal Output	208*/220/230/240 VAC	
AC Voltage Regulation (Battery Mode)	±1%	
Frequency Range (Synchronised Range)	46-54Hz or 56-64Hz	
Frequency Range (Battery Mode)	50 Hz ±0.1 Hz or 60Hz ±0.1 Hz	
Overload	100%-110%: 60 mins; 110%-125%: 10mins; 125%- 150%: 1 min; >150% : 400ms	
Current Crest Ratio	3:1 max	
Harmonic Distortion	≤2% @ 100% Linear Load; ≤5% @ 100% Non linear Load	
Transfer Time	Zero	
Output Power Factor	1	
EFFICIENCY		
AC Mode	≥96.6%	
ECO Mode	99%	
Battery Mode	≥95.5%	
BATTERY		
Battery Type	VRLA AGM Sealed Lead Acid Maintenance Free Batteries	
Battery Numbers	20 (10+10) pcs (up to 2 strings internal 40 pcs)	40 (20+20) pcs (1 string internal adjustable 30-40 pcs)
Recharge Time	9 hours recover to 90% capacity	
Charging Current (max)	1 to 12A (Adjustable via the display)	
Charging Voltage	±136.5 VDC ±1%	
GENERAL		
Operating Temperature	0-40°C (the battery life will be effected above 25°C)	
Operating Humidity	≥95% and non condensing	
Operating Altitude	≤1000m**	
Acoustic Noise Level	≤55dB @ 1 Metre	≤58dB @ 1 Metre
Smart RS 232 or USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix, and MAC	
Dimensions WxDxH (mm)	250 x 710 x 826	
Net Weight (kg)	43	44

* Derate capacity up to 90% when the output voltage is adjusted to 208VAC.

** If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be Derated 1% per 100m.

Product specifications are subject to change without further notice.

Note For Parallel operation Derate capacity to 90%



PowerPrime - Online Double Conversion UPS Three Phase Input and Output – Technical Specification

MODEL	PPRIM310	PPRIME320	PPRIME330
Power Rating kVA / kW	10kVA / 10kW	20kVA / 20kW	30kVA / 30kW
INPUT			
Nominal Voltage	380/400/415VAC (3PH+N+PE)		
Voltage Range	Low Line	110 VAC(PH+N) ±3% at 50% load 176 VAC (PH+N) ±3% at 100% load	
	High Line	300 VAC(PH+N) ±3% at 50% load 276 VAC (PH+N) ±3% at 100% load	
Frequency Range	46-54Hz at 50Hz / 56-64Hz at 60Hz (auto sensing)		
Phase	3 Phase with Neutral		
Power Factor	≥ 0.99 at 100% Load		
OUTPUT			
Phase	3 Phase with Neutral		
Nominal Output	380/400/415 VAC (Ph-Ph) and 220/230/240 VAC (Ph N)		
AC Voltage Regulation (Battery Mode)	±1%		
Frequency Range (Synchronised Range)	46-54Hz or 56-64Hz		
Frequency Range (Battery Mode)	50Hz ±0.1Hz or 60Hz ±0.1Hz		
Overload	100%-110%: 60 mins; 110%-125%: 10mins; 125%-150%: 1 min; >150% : 400ms		
Current Crest Ratio	3:1 max		
Harmonic Distortion	≤2% @ 100% Linear Load: ≤5% @ 100% Non Linear Load		≤1% @ 100% Linear Load: ≤3% @ 100% Non Linear Load
Transfer Time	Zero		
Output Power Factor	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	20 (10+10) pcs (up to 2 strings internal 40pcs)	40 (20 + 20) pcs internal 32 - 40 pcs external	32 (16 + 16) pcs internal 32 - 40 pcs external
Recharge Time	9 hours recover to 90% capacity		
Charging Current (max)	1 to 12A (adjustable via the display)		
Charging Voltage	±136.5 VDC ±1%	±218 VDC ±1%	±218 VDC ±1%
GENERAL			
Operating Temperature	0-40°C (the battery life will be effected above 25 C)		
Operating Humidity	≥95% and non condensing		
Operating Altitude	≤1000m**		
Acoustic Noise Level	≤5dB @ 1 Metre	≤8dB @ 1 Metre	≤65dB @ 1 Metre
Smart RS 232 or USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix, and MAC		
Dimensions WxDxH (mm)	250 x 710 x 826		300 x 815 x 1000
Net Weight (kg)	46	47	74

* Derate capacity up to 90% when the output voltage is adjusted to 208VAC.

** If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be Derated 1% per 100m.

Product specifications are subject to change without further notice.

Note For Parallel operation Derate capacity to 90%

*** Healthcare options - external batteries only

The BPC Group

BPC is an international company operating for 25 years globally, with partners and distributors located around the world.

These regions include:

EUROPE

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

MIDDLE EAST

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

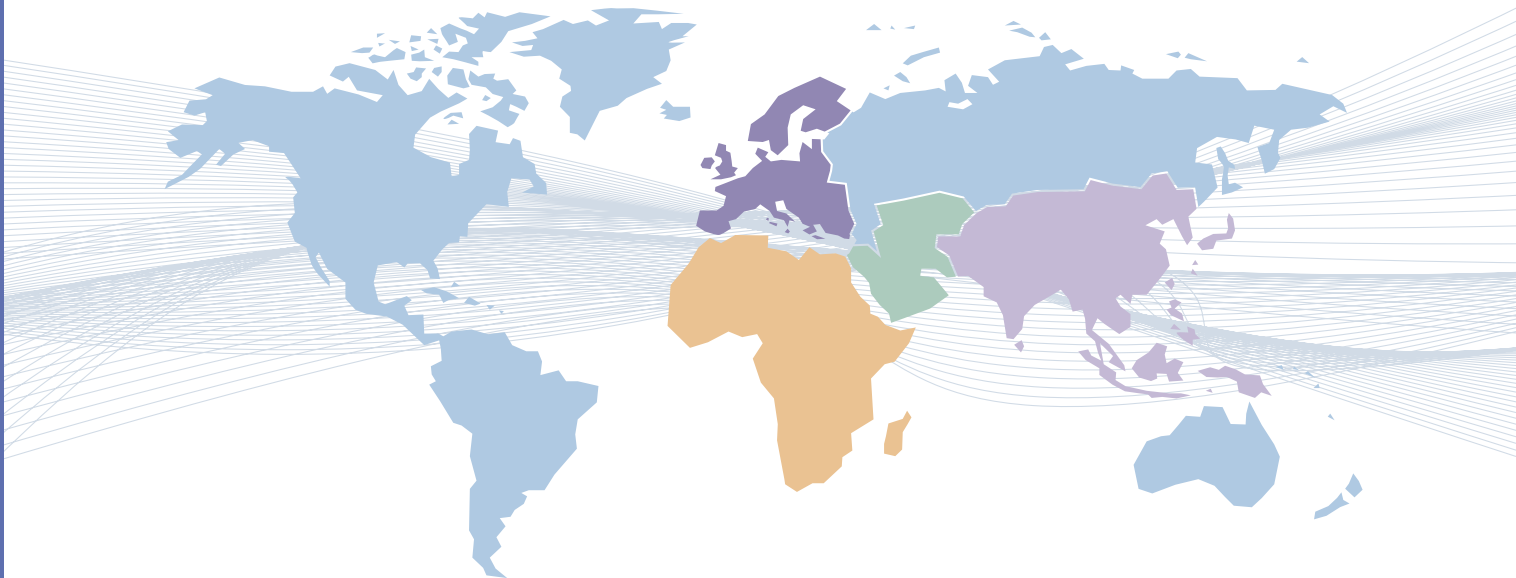
AFRICA

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.



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