

PowerPrime™ Series

Single and Three Phase Input and Single Phase Output
True On-Line Double Conversion UPS 10kVA – 20kVA

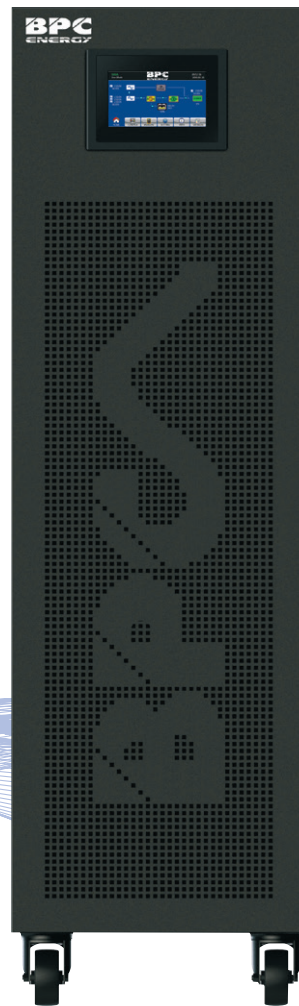
»» Sophisticated

»» 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.

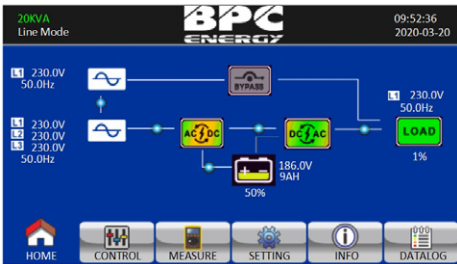


- »» Server Rooms
- »» Financial Services
- »» Healthcare
- »» IT Solutions
- »» Telecommunications

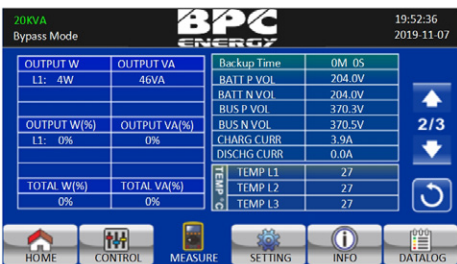
PowerPrime Features

ADVANCED TOUCH SCREEN WITH LCD DISPLAY

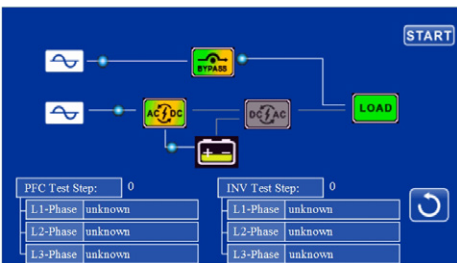
PowerPrime UPS have an advanced colour touch screen providing precise LCD displays with real time mimic status and parameter readings via the intelligent Digital Signal Processor (DSP) controller. Touch either of the control, measure, setting, information or data log sub menu icons to enter into various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



The PowerPrime main control 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 and automatically on restart to determine the UPS system is fully operational and that the site conditions are acceptable.

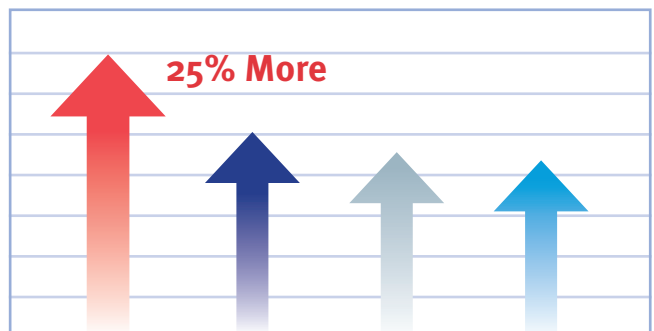


The panel provides extensive diagnostics, controls and settings with simple touch screen pages allowing access to a variety of information and data. Measuring real parameters including AC input and output voltage, power conditions in VA/ watts/ power factor, frequency, battery voltage, load levels, battery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

- True OnLine double conversion
- 1/1 or 3/1 configuration
- Advanced touch screen display
- High AC/AC efficiency at >96.6%
- Intelligent event history/500 alarm logs
- Unity output power factor
- Wide Input Voltage (110V - 300V)
- Smart Battery Management
- Larger internal charger for long runtimes
- Parallelable up to 3 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

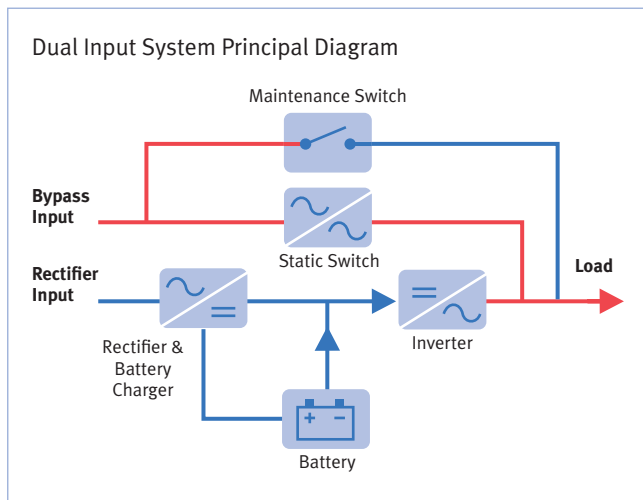
The PowerPrime range adopts DSP and highly efficient electronic IGBT inverter technology providing one of the highest power density ratios in the UPS industry. Advanced inverter circuitry delivers unity power factor maximising power output.



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 easily be located without the need for special site considerations.



* Product may differ from image

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.

PARALLEL READY

The BPC philosophy is both simple and elegant. The UPS is connected directly to the user's distribution system, eliminating the vulnerable centralised static switch and control circuits. 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.



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.

3/1 – 1/1 INPUT CONFIGURATION

The PowerPrime has straightforward configurable input terminal connections and is provided with multifunction jumpers to allow different variants of connections. The PowerPrime is also fitted with large connection terminals and secure gland plates to allow all types of cable installation with ease.

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.

CONFIGURABLE BATTERY VOLTAGE

The 20kVA version 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.

ENVIRONMENTALLY FRIENDLY ENERGY SAVING

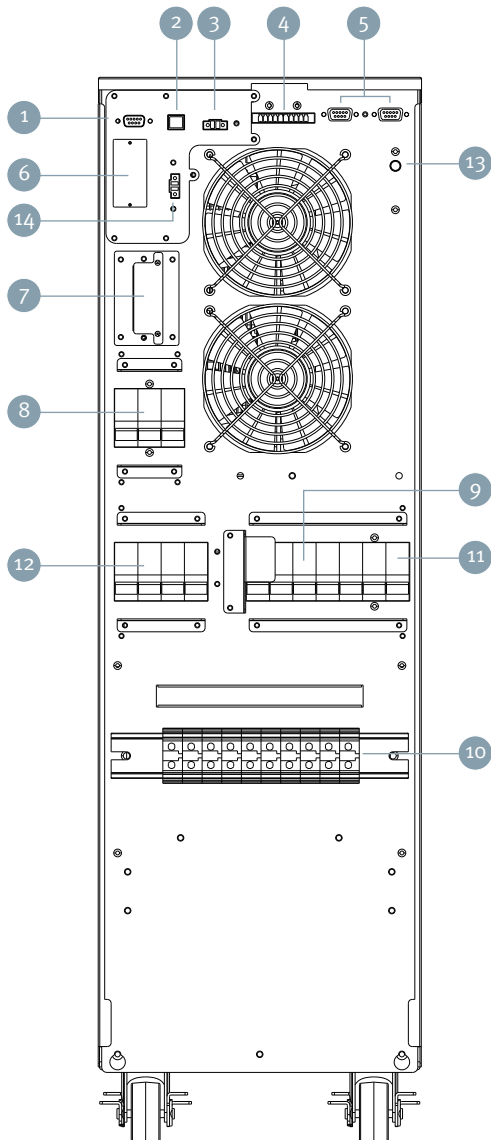
The intelligent microprocessor based control system allows for the very low power consumption offered by the interactive ECO Mode which provides efficiencies as high as 99%. PowerPrime switches instantaneously to online double conversion operation automatically when the mains becomes unstable and fluctuates outside the normal frequency and voltage parameters.

COMPACT DESIGN

The PowerPrime system offers one of the smallest footprints available on the market, providing exceptional power density of 112kW/m² at 20kVA / 20kW capacity 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 RS 232 communication port
- 2 USB communication port
- 3 Emergency power off connector (EPO connector)
- 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)



PowerPrime - Online Double Conversion UPS Technical Specification

MODEL		PPRIME 10k	PPRIME 20k
Power Rating kVA / kW		10kVA / 10kW	20kVA / 20kW
INPUT			
Voltage Range	Low Line	110 VAC(Ph N) $\pm 3\%$ at 50% Load 176 VAC(Ph N) $\pm 3\%$ at 100% Load	
	High Line	300 VAC(Ph N) $\pm 3\%$ at 50% Load 276 VAC(Ph N) $\pm 3\%$ 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)		$\pm 1\%$	
Frequency Range (Synchronised Range)		46 - 54Hz or 56 - 64Hz	
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz	
Overload		100%~110%: 60min; 110%~125%: 10min; 125%~150%: 1min; $\gt 150\%$	
Current Crest Ratio		3:1 max	
Harmonic Distortion		$\leq 2\%$ @ 100% Linear Load; $\leq 5\%$ @ 100% Non linear Load	
Transfer Time		Zero	
Output Power Factor		1.0	
EFFICIENCY			
AC Mode		$\gt 96.6\%$	
ECO Mode		99%	
Battery Mode		$\gt 95.5\%$	
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 40 pcs) Adjustable 32 - 40 pcs
Recharge Time		9 hours recover to 90% capacity	
Charging Current (max)		1.0 to 12.0A (Adjustable via display)	
Charging Voltage		± 136.5 VDC 1%	± 218 VDC 1% (32pcs) up to ± 275 VDC 1% (40pcs)
GENERAL			
Operating Temperature		0 - 40°C (the battery life will down when $\gt 25^\circ\text{C}$)	
Operating Humidity		$\gt 95\%$ and non-condensing	
Operating Altitude		$\leq 1000\text{m}^{**}$	
Acoustic Noise Level		$\leq 55\text{dB}$ @ 1 Metre	$\leq 58\text{dB}$ @ 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%

The BPC Group

BPC is an internationally recognised UK company trading globally for almost 25 years, with partners and distributors located around the world.

These regions include:

EUROPE

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

MIDDLE EAST

Bahrain, Jordan, Kuwait, Saudi Arabia, Lebanon, Oman, Qatar, UAE, Yemen.

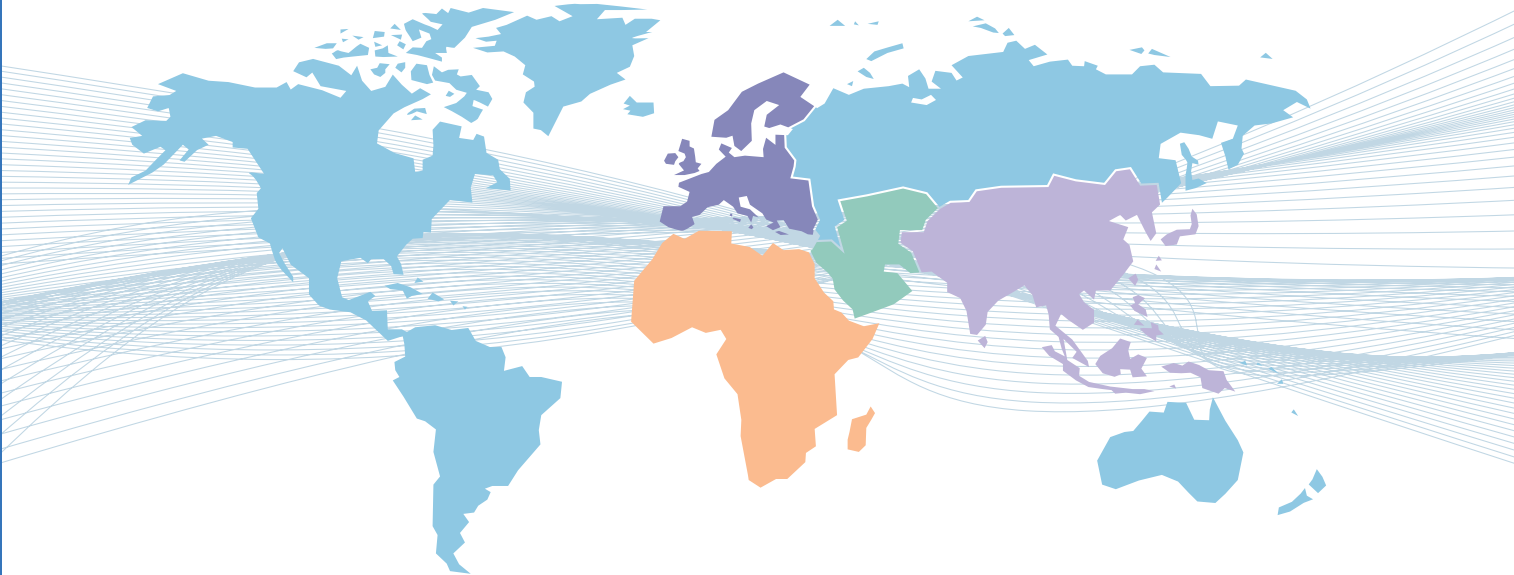
AFRICA

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.



Authorised Distributor



BPC Energy Limited

BPC House
Romsey Industrial Estate
Greatbridge Road
Romsey
Hampshire SO51 0HR
United Kingdom

Tel: +44 (0) 1794 521200
Fax: +44 (0) 1794 521400
e-mail: sales@bpc-ups.com

