

PowerPrime™ Series

True On-Line Double Conversion UPS 10kVA – 60kVA

» 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.

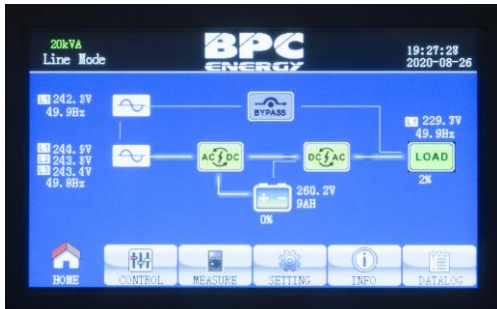
The PowerPrime professional range uses state of the art technology and components to provide maximum network protection where the load is continuously supplied by the inverter with a filtered and stabilised waveform and frequency to the highest standards.

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

PowerPrime Features

ADVANCED TOUCH SCREEN WITH LCD DISPLAY

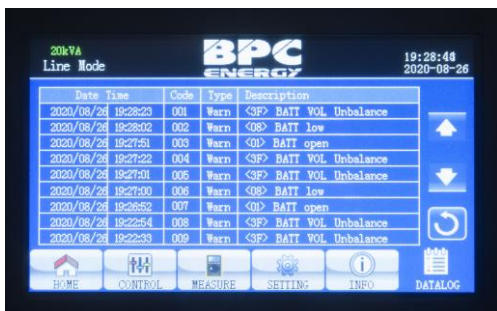
PowerPrime UPS have an advanced colour touch (4.3 – 5 inch) screen providing precise LCD displays with real time mimic status and parameter readings via the intelligent Digital Signal Processor (DSP) controller. Touch either of the control, measure, setting, information or data log sub menu icons to 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.

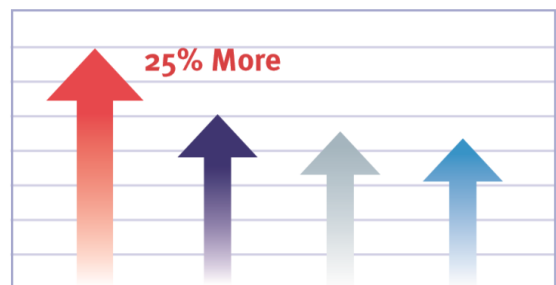


The panel provides extensive diagnostics, controls and settings with simple touch screen pages allowing access to a variety of information and data. Measuring real parameters including AC input and output voltage, power conditions in VA/Watts/Power Factor, frequency, battery voltage, load levels, battery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



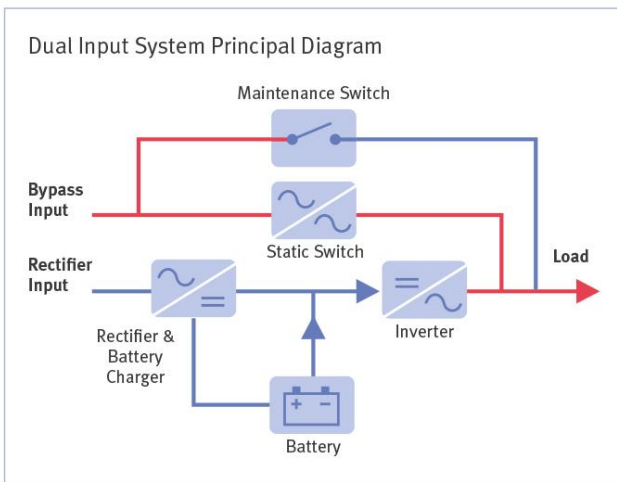
ENVIRONMENTALLY FRIENDLY ENERGY SAVING

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 easily be located without the need for special site considerations.



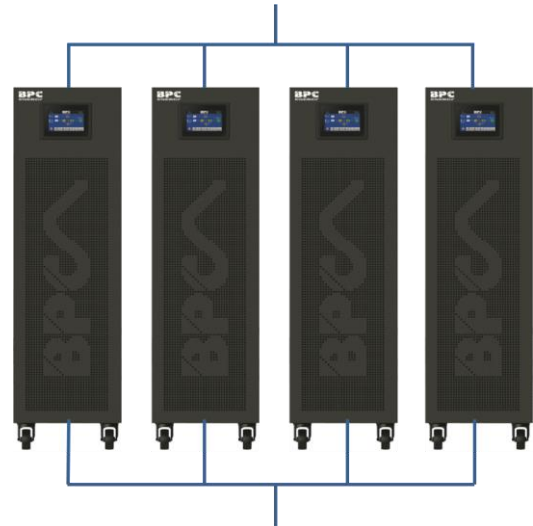
* Product may differ from image

MULTIPLE COMMUNICATION OPTIONS

This feature allows 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. The design configuration means that the dry contacts and SNMP work together simultaneously.

PARALLEL READY

The BPC philosophy is both simple and elegant. The UPS is connected directly to the user's distribution system, eliminating and vulnerable centralised static switch and control circuits. 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 MEBS 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 all types of cable installations with ease.

PowerPrime Features

SMART BATTERY MANAGEMENT

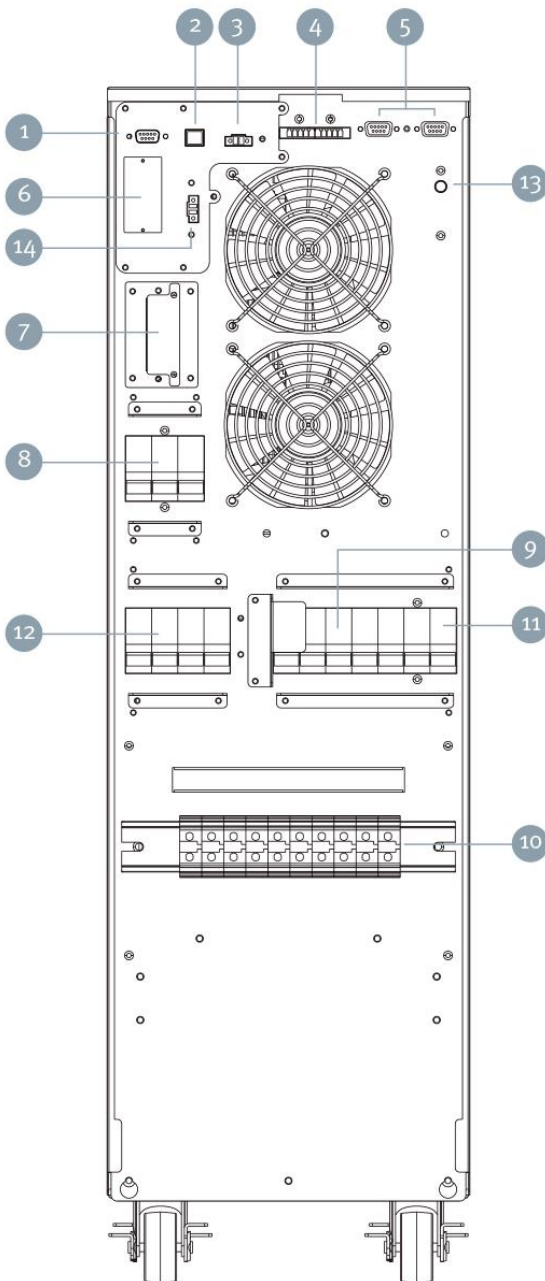
Intelligent battery management combined with exceptional 95.5% DC/AC inverter efficiency means that PowerPrime battery sizing is optimised and greater runtimes are achieved. Maximum battery care is maintained by a three level charging system to achieve the best performance and operating life possible.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

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.



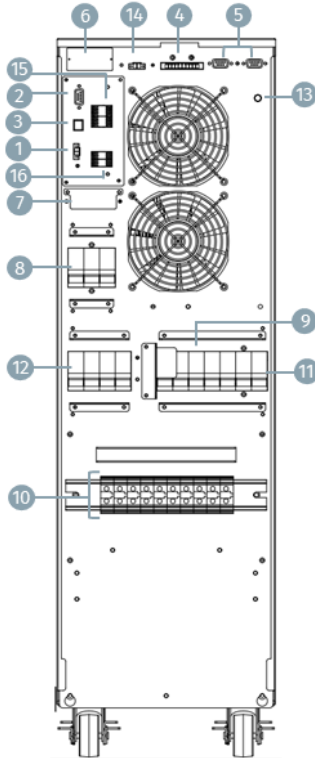
Single Phase Output 10kVA – 20kVA

- 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)

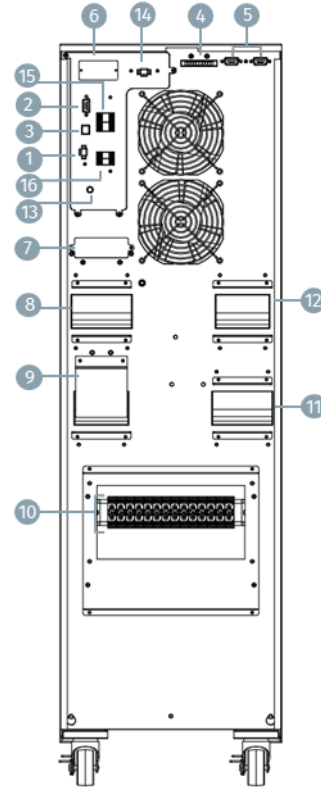
CONFIGURABLE BATTERY VOLTAGE

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

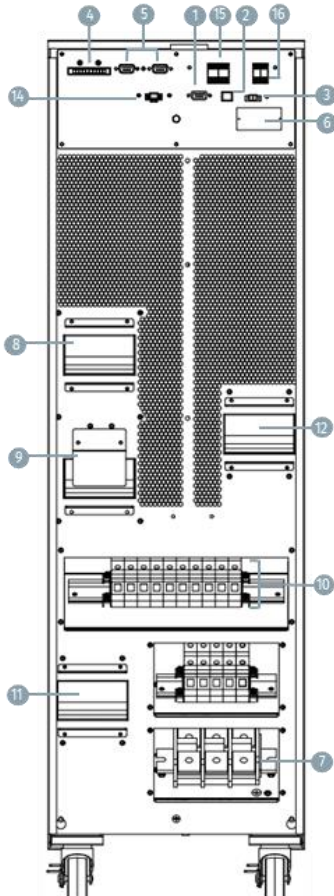
PowerPrime Features



Three Phase Output 10kVA – 20kVA



Three Phase Output 30kVA



Three Phase Output 60kVA

- 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)
- 15 Input DRY port terminals
- 16 Output DRY port terminals

CONFIGURABLE BATTERY VOLTAGE

The 60kVA single phase output version within the range has the flexibility to configure battery voltages from ± 20 block system to either ± 16 or ± 18 blocks depending on application and runtime requirements.

PowerPrime – On-Line Double Conversion UPS

Single Phase Input and Output Technical Specification



MODEL		PPRIME 10k	PPRIME 20k
Power Rating kVA / kW		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 (Batt. 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 32 - 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%	± 218 VDC ±1% for 32 pc up to ± 218 VDC ±1% for 40 pc
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

PowerPrime – On-Line Double Conversion UPS

Three Phase Input and Output Technical Specification



MODEL	PPRIM310	PPRIME320	PPRIME330	PPRIME360
Power Rating kVA / kW	10kVA / 10kW	20kVA / 20kW	30kVA / 30kW	60kVA / 60kW
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 (Batt. 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)	32 (16+16) pcs	32 (16+16) pcs (up to 2 string Internal 64 pcs)	40 (20+20) pcs (1 string internal adjustable 32 - 40 pcs)
Recharge Time	9 Hours recover to 90% capacity			
Charging Current (max)	1 to 12 A (adjustable via the display)			1 to 18 A (adjustable via the display)
Charging Voltage	± 136.5 VDC ±1%	± 218 VDC ±1%	± 218 VDC ±1%	± 218 VDC ±1% for 32 pc up to ± 272 VDC ±1% for 40 pc
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 meter	< 58dB @ 1 meter	<65dB @ 1 meter	< 70dB @ 1 meter
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	87

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



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