## **Inverters**

Single Phase Input & Output Simulated and Pure Sinewave Systems

# >>> Solar >>> Green >>> Compact









The Home Office ICT Inverter is a compact design for home and office appliances. It has a selectable wide input voltage switch for flexibility, overload and short circuit protection, providing a green substitute for generators without air pollution.

The Smart Home Inverter is connected to batteries and the main electrical source at the same time. With mains power the system is designed to charge the batteries and store power, when there is a mains failure, the inverter converts the DC to AC to power the loads. Ideal source of energy when conventional power is not available.

The Expert Professional Inverter combines functions of an inverter, solar charger and battery charger to offer uninterruptible power. The LCD display offers comprehensive user-configurable information such as battery charging current, AC/Solar charger priority, and acceptable input voltage depending on the application.

The PowerGem Inverter is designed for sustaining much larger autonomy batteries for applications where the mains power supply is unreliable and expected to be absent for long periods of time. Combined with internal super-chargers and an intelligent LCD display, the Inverter is able to convert DC to AC and replenish the energy back in the battery quickly and efficiently.



# Home Office ICT Inverter 600VA – 1500VA



- Selectable input voltage range for ICT equipment and home appliance type applications
- 12 Vdc or 24 Vdc batteries available
- Selectable charging current: 10A or 20A
- Auto restart while AC is recovering



- Smart battery charger design for optimised battery performance
- Overload and short circuit protection
- Multiple LED indication and audible alarms
- Suitable for information and communication equipment, telephone systems, broadband routers, computer related devices and low energy lights

MODEL	ICT INV 600	ICT INV 850	ICT INV 1500		
Power Rating VA / Watts	600 / 360	850 / 600	1500 / 1050		
INPUT					
Nominal Voltage	230 Vac				
Voltage Range (Selectable)	180 - 260 Vac (for ICT equipment) 100 - 300 Vac (for home appliance type application)				
Frequency	50 / 60 Hz (auto sensing)				
OUTPUT					
AC Voltage Regulation (Battery Mode)	230 Vac ± 10%				
Transfer Time	20ms (max.)				
Waveform	Simulated Sinewave				
BATTERY					
Nominal Battery Voltage	12 Vdc		24 Vdc		
Floating Charge Voltage	13.7 Vdc ± 2%		27.4 Vdc ± 2%		
Low Battery Alarm Voltage	10.2 Vdc ± 2%		20.4 Vdc ± 2%		
Shutdown Voltage	9.9 Vdc ± 2%		19.8 Vdc ± 2%		
Overcharge Protection	15 Vdc ± 2%		30 Vdc ± 2%		
Maximum Charge Current	10A or 20A (Selectable)				
Recommended Battery Capacity	100AH - 200AH (normal recommendation), 300AH - 400AH (depending on reliability of mains supply)				
GENERAL					
Full Protection	Overload and short circuit protection				
Operating Humidity	o - 90% relative humidity (non-condensing)				
Operating Temperature	o°C - 40°C				
Storage Temperature	-15°C - 70°C				
Dimensions (mm) WxDxH	290 x 289 x 127				
Net Weight (kgs)	5	7	10		

## Smart Home Inverter 700VA - 1200VA

- Pure Sinewave Inverter
- Selectable input voltage range for ICT equipment and small home appliances
- · LCD user friendly display panel
- Selectable charging current based on applications
- Auto restart while AC is recovering
- Overload and short circuit protection



- Compatible for generators & computer-related devices
- Smart battery charger design for optimised battery performance
- Cold start function
- Suitable for intelligent home with ICT equipment plus LCD and/or small house appliances

MODEL	SMART HOME 700	SMART HOME 1200				
Power Rating VA / Watts	700 / 500	1200 / 840				
INPUT						
Nominal Voltage	230 Vac					
Voltage Range (Selectable)	170 - 280 Vac (for personal computers) / 90 - 280 Vac (for home appliances)					
Frequency	50 / 60 Hz (auto sensing)					
ОИТРИТ						
AC Voltage Regulation (Battery Mode)	230 Vac ± 5%					
Surge Power	1400 VA	2400 VA				
Efficiency (Peak)	90%					
Transfer Time	10ms (for ICT equipment) / 20ms (for home appliances)					
Waveform	Pure Sinewave					
BATTERY						
Nominal Battery Voltage	12 Vdc					
Floating Charge Voltage	13.5 Vdc					
Low Battery Alarm Voltage	11.5 Vdc					
Shutdown Voltage	10.5 Vdc					
Overcharge Protection	15 Vdc					
Maximum Charge Current	10A or 15A (Selectable)	10A or 20A (Selectable)				
Recommended Battery Capacity	100AH - 200AH (normal recommendation), 300AH - 400AH (depending on reliability of mains supply)					
GENERAL						
Full Protection	Overload and short circuit protection					
Operating Humidity	o-90% relative humidity (non-condensing)					
Operating Temperature	o°C - 5o°C					
Storage Temperature	-15°C - 70°C					
Dimensions (mm) WxDxH	290 x 289 x 127					
Net Weight (kgs)	4.5					



# **Expert Professional Inverter 1kVA - 5kVA**

- Pure Sinewave Inverter
- Selectable input voltage range for ICT equipment and home appliances
- · LCD user friendly display panel
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to mains voltage or generator power
- Parallel operation up to 4 units (Expert 4K & 5K models only)

- Auto restart while AC is recovering performance
- · Overload and short circuit protection
- Smart battery charger design for optimised battery performance
- Cold start function
- Suitable for intelligent homes with ICT equipment, LCD TV and house appliances such as light bulbs, fluorescent tubes, fans, TVs, refrigerators, etc.

MODEL	EXPERT 1K	EXPERT 2K	EXPERT 3K	EXPERT 4K	EXPERT 5K
Power Rating VA / Watts	1000 / 800	2000 / 1600	3000 / 2400	4000 / 3200	5000 / 4000
NPUT					
Nominal Voltage	230 Vac				
Voltage Range (Selectable)	170 - 280 Vac (for personal computers) / 90 - 280 Vac (for home appliances)				
Frequency Range	50 / 60 Hz (auto sensing)				
OUTPUT					
AC Voltage Regulation (Battery Mode)			230 Vac ± 5%		
Surge Power	2000 VA	4000 VA	6000 VA	8000 VA	10000 VA
Efficiency (Peak)	90%				
Transfer Time	10ms (for personal computers) / 20ms (for home appliances)				
Waveform	Pure Sinewave				
BATTERY					
Nominal Battery Voltage	12 Vdc	24 Vdc 48 Vdc		/dc	
Floating Charge Voltage	13.5 Vdc	27 Vdc 54 Vdc		/dc	
Overcharge Protection	15.5 Vdc	31 Vdc 60 Vdc		/dc	
Maximum Charge Current	10A or 20A	20A or 30A 20A or 30A		r 30A	
Recommended Battery Capacity	100 AH - 200 AH (normal recommendation) 300 AH - 600 AH (depending on reliability of mains supply)				
SOLAR CHARGER (OPTIONAL)					
Charging Current			50A		
Maximum PV Array Open Circuit Voltage	30 Vdc	60 '	/dc	90 '	/dc
Standby Power Consumption	1W	21	N	21	N
GENERAL					
Full Protection	Overload and Short Circuit Protection				
Operating Humidity	5% - 95% relative humidity (non-condensing)				
Operating Temperature	0°C - 55°C				
Storage Temperature	-15°C - 60°C				
Dimensions (mm) WxDxH	240 x 95 x 316	272 X 100 X 355		295 x 120 x 468	
Net Weight (kgs)	5	6.4	6.9	9.8	9.8

## PowerGem Inverter 3kVA – 10kVA

- True online double conversion
- Digital Signal Processor (DSP) technology
- Intelligent self-diagnostics
- True sinewave output
- LCD user friendly display panel
- Compatible to mains voltage or generator power
- Cold start function
- Overload and short circuit protection



- Smart battery charger design for optimised battery performance
- Internal super (built-in) charger
- Larger battery stands/cladded racks or cabinets
- Intelligent slot for SNMP or Relay card
- Parallel operation (10kVA) up to 3 units
- Output power factor o.8

MODEL	PGEM 3KC24	PGEM 10KC20			
Power Rating VA / Watts	3000 / 2400	10000 / 8000			
INPUT					
Nominal Voltage	230V				
Voltage Range (Selectable)	160 Vac - 300 Vac	110 Vac - 300 Vac			
Frequency Range	40 Hz - 70 Hz	46 Hz - 54 Hz @ 50 Hz system (56 Hz - 64 Hz @ 60 Hz system - optional)			
ОИТРИТ					
AC Voltage Regulation (Battery Mode)	±1%				
Efficiency (Peak)	90%	>89%			
Transfer Time	Zero				
Waveform	Pure Sinewave				
BATTERY					
Nominal Battery Voltage	72 Vdc	240 Vdc			
Floating Charge Voltage	82.1 Vdc	273 Vdc			
Low Battery Alarm Voltage	67.7 Vdc	228 Vdc			
Shutdown Voltage	64.8 Vdc	294 Vdc			
Overcharge Protection	88.2 Vdc	294 Vdc			
Maximum Charge Current	24A	20Å			
Recommended Battery Capacity	240 AH	200 AH			
GENERAL					
Operating Humidity	o - 95% (non-condensing)				
Operating Temperature	o°C - 40°C				
Storage Temperature	-20°C - 50°C	-15°C - 60°C			
Dimensions (mm) WxDxH	190 x 419 x 318 250 x 592 x 826				
Net Weight (kgs)	16 35				

# **Advanced Power Conversion Solutions**

### The BPC Group

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

These regions include:

#### **EUROPE**

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

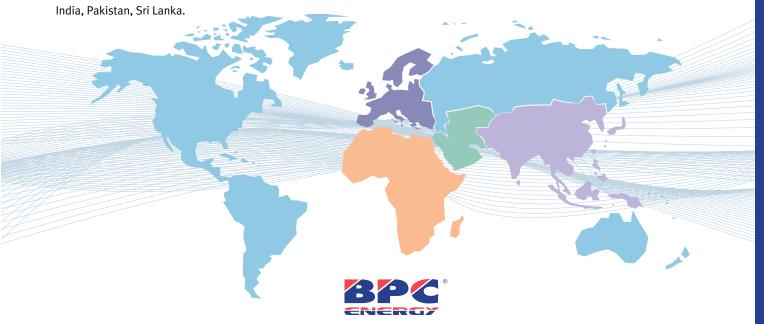
#### **MIDDLE EAST**

Bahrain, Jordan, Kuwait, KSA, 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. 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.

#### **FAR EAST & ASIA**



The British Power Conversion Company

Authorised Distributor