

Emergency Power System 1000VA ~ 5000VA

Our **Inverter/Emergency Power System** series aim in the provision of sufficient quality backup power in order to sustain "alive" home or business vital systems in case of a power failure! With many top features and power to spare, they mark the right choice for the very demanding power backup solutions, including the running of *Heaters, Air Conditioners, Refrigerators, TVs, Motors, Lights, Pumps, Automatic Doors, Computers, etc.*

They have been designed to act as a reliable power backup system that is vital for the continuous operation of critical home/business equipment, aiming to reliability, flexibility, ease of use and management, great runtime expandability and performance, based on a stable multi-purpose industrial-class platform with *Pure Sine-Wave* with *adjustable AVR* technology.

Industrial-Class features within these models make them top and reliable performers protecting your investment for many years to come! We are proud to recommend these systems to you!



- Pure Sine-Wave Output Power for special applications
- Microprocessor based full Digital Control
- Adjustable Automatic Voltage Regulator (AVR)
- High Charging Current for Quick Recharging- up to 5 times faster!
- Integrated LCD-based multi-function Status Monitor
- EMI, RFI, Surge, Lighting, Spike, Brownout & Over-Voltage Protection
- High Runtime Expandability allowing for the connection of any number of external battery arrays in parallel configuration.
- External Batteries are "Hot-Swappable"
- Generator Compatible Interface allows for Longer Runtime
- Charging Bypass Circuitry and Reverse Polarity Protection
- Auto-Restart, auto-Changeover, auto-Charge Functions
- Easy to Use, Manage, Service
- Multiple power Output Interfaces for greater flexibility
- High Performance Output, High Reliability & Elaborate Features suitable for multi-purpose Environments, such as the support of Heaters, AC units, Refrigeration Units, Motors, Lights, etc.





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Imagine there is a prolonged power failure due to public network overload, or due to a natural disaster! No communications, no computers, no lights, no refrigerator or freezer, no entertainment equipment, no heater, no water pump, no motor of any type can work! Unless of course, your in-house electrical installation uses backup power that can immediately take over providing much needed and continuous power to all your critical systems! *CyberPower's Inverter/Emergency Power System can do just that*! *Automatically*! *Quietly*! No need for fuel of any type since this is an 100% electrical power backup system based on safety *Batteries* and an elaborate *Inverter Technology*! This *maintenance free* unit can *automatically take over in less than 10 milliseconds* following a power failure, *providing high quality regulated AC power* where needed!

Please see the table below for some of the most *important appliances* with their approximate *Power Consumption Ratings*, that might need to be in operation during a power failure:

APPLIANCE	POWER RATING
Energy Lamps	~ 5 – 15W
DVD Player	~ 25W
4 feet Fluorescent	~ 40W
Air Fan	~ 50W
Satellite Decoder	~ 70W
Refrigerator / Freezer	~ 100 – 200W
42-inch LCD TV	~ 200W
Desktop Computer System	~ 350W
12000 BTU Air Conditioner	~ 1300W
Microwave Cooker	~ 1300W
Pumping Machine	~ 1000 – 1500W



CyberPower provides a full range of Inverter/EPS products suitable for every need and for every budget:





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The unit *can expand using an unlimited number of daisy-chained batteries*, to suit every need! CyberPower's wide model availability on Inverter/EPS units allow you to start by utilizing just one battery, (*like on the CPS1000E model*)!

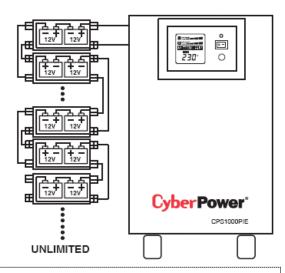
Batteries are being charged by utility AC power, same like on every other UPS type system! *In the event of a power failure the unit will switch to battery backup* providing power to the lines feeding pre-select areas of the home or office! Its that simple!

Inverter/EPS current models can sustain from 700W up to 3500W of actual load connected to them for a quite prolonged period of time, depending on the number of batteries daisy-chained onto the unit. As shown on the reference side diagrams, daisy-chaining the batteries is easy, and CyberPower can provide all the cabling accessories needed to do the job together with detailed installation documentation.

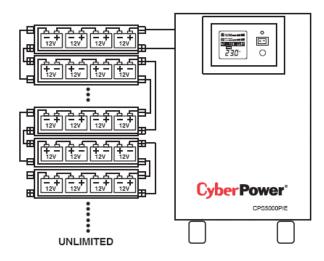
A typical home can function rather well with less than 3000W consumption in case on a prolonged power failure emergency! Lights, Water Pump, Central Heating, Communications, and Refrigeration are the most vital systems one needs to take into account in the event of a prolonged failure. And the EPS can do exactly that!



Operating the Unit is extremely Simple and Efficient! A build-in LCD with user friendly interface provides all types of relevant information to the user, so appropriate and timely action can be taken as needed!



Battery Expansion is simple and effective as shown on the two diagrams above and below based on the 3KVA (24V DC-Input) and on the 5KVA (48V DC-Input) units.



Load/Runtime reference chart using CyberPower's CPS3000PIE EPS together with 12V 200AH Batteries:

Load in %	Load in Watts	2 Batteries	4 Batteries	6 Batteries	8 Batteries	10 Batteries
		Runtime in HOURS				
25%	600 W	7.30	14.60	21.90	29.20	36.50
50%	1203 W	3.08	6.17	9.25	12.33	15.42
75%	1804 W	1.72	3.43	5.15	6.87	8.58
100%	2402 W	1.00	2.00	3.00	4.00	5.00



Pure Sine Wave

Load/Runtime reference chart using CyberPower's CPS5000PIE EPS together with 12V 200AH Batteries:

Load in %	Load in Watts	4 Batteries	8 Batteries	12 Batteries	16 Batteries	20 Batteries
		Runtime in HOURS				
25%	875	11.87	23.73	35.60	47.47	59.33
50%	1751	5.08	10.17	15.25	20.33	25.42
75%	2625	2.92	5.83	8.75	11.67	14.58
100%	3502	1.97	3.93	5.90	7.87	9.83



ACF RECULATOR

Surge Protection



CAPACITY:

- CPS1000PIE and CPS1000E: 1000VA or 700W
- CPS1500PIE: 1500VA or 1050W
- CPS3000PIE: 3000VA or 2400W
- CPS5000PIE: 5000VA or 3500W

LCD DISPLAY:

Used to display detailed information on the UPS status, (Line / Battery Mode), and current power conditions. Displays 10 different Information blocks including: Load Level Meter, Battery Charge Level Meter, Fault Indicator, Overload Indicator, Silent Mode Indicator, AVR in Use, Battery in Use, Input Voltage Level, Output Voltage Level, & Estimated Run-Time based on Actual Load.

AC INPUT POWER:

- AC Input Voltage Range: 140V ~ 300V, 50Hz / 60 Hz (+/- 5Hz) auto-sensing
- Over Voltage Protection: Surge up to 400V and able to handle prolonged Over Voltage periods

CHARGING CURRENT:

- CPS1000E and CPS1500PIE: 15 Amps
- CPS1000PIE: 10 Amps
- CPS3000PIE: 50 Amps
- CPS5000PIE: 25 Amps

DC INPUT POWER:

- CPS1000E: 12V
- CPS1000PIE, CPS1500PIE and CPS3000PIE: 24V
- CPS5000PIE: 48V

OUTPUT POWER:

- Single Phase
- On Battery Output Voltage for the CPSXXXXPIE Series: Pure Sine-Wave at 220V (+/- 10%)
- On Battery Output for CPS1000E: 0~40% Load -> Pure Sine-Wave & 40~100% Load -> Trapezoidal Wave (+/- 10%)
- On Battery Output Frequency: 50Hz / 60 Hz (+/- 1%)
- Typical Transfer Time: Less than 10 ms
- Overload Protection Scheme: On Main Power by Circuit Breaker, and on Battery Power by Internal Current Limiting
- Automatic Voltage Regulator (AVR): Boost and Buck
- Surge Protection: 1000 Joules

EXTERNAL BATTERY INFORMATION:

- Recommended type of battery: 12V / 100AH or 12V / 200AH
- Unlimited No. of Batteries can be connected in parallel to increase Runtime!
- CPS1000E: Minimum 1 x 12V battery
- CPS1000PIE, CPS1500PIE and CPS3000PIE: Minimum 2 x 12V batteries
- CPS5000PIE: Minimum 4 x 12V batteries
- System can also make use 24V or 48V Batteries in a configuration that satisfies the required DC Input Power specs
- Typical Recharge Time: Usually 8~12 hours depending on model and battery type used

STATUS INDICATORS:

- Power-On LED and Multi-function LCD Display
- · Audio Alarms for: Overload, On-Battery, Low-Battery

RECEPTACLES:

- CPS1000E: 2x Schuko (or British or French) type
- CPS1000PIE and CPS1500PIE: 1 x Schuko (or British or French) type, and 4 x IEC-320-C13
- CPS3000PIE and CPS5000PIE: 2 x Schuko (or British or French) type, and Terminal Block

PHYSICAL INFORMATION:

Dimensions: CPS1000E: 153 (L) x 208 (W) x 230 (H) mm CPS1000PIE & CPS1500PIE : 261 (L) x 206 (W) x 325 (H) mm CPS3000PIE & CPS5000PIE : 330 (L) x 260 (W) x 440 (H) mm Weight: CPS1000E: 8kg CPS1000PIE: 16.6kg. CPS1500PIE : 18.6kg. CPS3000PIE: 36kg. CPS5000PIE : 44kg - [Easy Mobility on Wheels]

Storage Temperature: -15° C ~ $+45^{\circ}$ C

Operating Temperature: 0°C ~ 40°C. Operating Humidity: 0%~95% non-condensed.

CyberPower's Manufacturing Facilities are ISO 9001:2000, ISO 14000, and QC080000 Approved