

Emergency Power System





## **The Smart and Powerful Inverter**

The Emergency Power System (EPS) is not only an inverter but also contains a powerful smart charger: It contains three modules in a single unit: Inverter, Charger and Switch.

The EPS is a heavy-duty, continuous working module, generating a sinusoidal modified step wave from a 12V/24V battery bank, supplying energy to various loads such as resistive load (heater), inductive load (air conditioners, refrigerators), motors (vacuum cleaners), and rectifier load (computers). All EPS series are designed to work in heavy load condition and provide a rapid and complete charging process.

The smart charger can be set with different charging profiles and battery capacities to match in various battery types and sizes. The switch module automatically diverts the energy transfer path between inverter and utility source. The transfer time is 1/4~1/2 of the total cycle time. The high power charger (120A) can charge a 12V/1600 AH battery bank in 14 hours. For example, a single unit of EPS2424 with a 1600 AH battery bank can supply a 2000W workload for over 8 hours after a charge of 14 hours.

## Features

- Continuous output inverter and high power battery charger included
- High efficient, high surge capacity and low idle current
- Supply energy to various loads such as resistive load, inductive load, motors and rectifier load
- Load sensing adjustable
- Long backup time up to 10 hours (based on the battery bank and loads)

CiTO EPS series is an extremely good choice for utility back up power for various loads as Heater, Air Conditioner, Refrigerator, Vacuum Cleaner and PCs.... It also can be used as a UPS for computers.



## **CiTO EPS Inverter Series**



## **Technical Specifications**

Model Specification	SYS 1512	SYS 1524	SYS 2412	SYS 2424	SYS 3624
Continuous Power	1500 Watts	1500 Watts	2400 Watts	2400 Watts	3600 Watts
Efficiency	90% max.				
Output Waveform	Simulated Sine				
Input Power at Rated Power	165 amps	82.5 amps	264 amps	132 amps	198 amps
Input Power at Short Circuit	400 amps	225 amps	720 amps	360 amps	540 amps
Nominal Input Voltage	12 Vdc	24 Vdc	12 Vdc	24 Vdc	24 Vdc
Input Voltage Range	10.0~15 Vdc	20.0~30 Vdc	10.0~15 Vdc	20.0~30 Vdc	20.0~30 Vdc
Auto Low Battery Protection (Heavy/Light Load)	10.0 Vdc	20.0 Vdc	10.0 Vdc	20.0 Vdc	20.0 Vdc
DC mode output Voltage Regulation	+/-10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Power Factor Allowed	0.8 to 1				
Frequency Regulation	+/-1 Hz				
Standard Output Voltage	120 / 220 / 230 Vac				
Loading Sensing	Selectable	Selectable	Selectable	Selectable	Selectable
(Power Saving)	0, 2%, 4%, 6%	0, 2%, 4%, 6%	0, 2%, 4%, 6%	0, 2%, 4%, 6%	0, 2%, 4%, 6%
Transfer Time	1 Cycle				
Forced Air Cooling	Variable Speed				
Automatic Transfer Relay	15A	15A	30A	30A	30A
Adjustable Charge Rate	7 ~ 50 amps	3 ~ 35 amps	12 ~ 100 amps	7 ~ 50 amps	7 ~ 70 amps
Number of Charge Profiles	2	2	2	2	2
Resistive Load	100%	100%	100%	100%	100%
Inductive Load	YES	YES	YES	YES	YES
Motor Load	YES	YES	YES	YES	YES
Rectifier Load	YES	YES	YES	YES	YES
Wall Mounting	YES	YES	YES	YES	YES
Shipping Weight (kg)	22.5	22.5	24.5	24.5	25
Dimensions (WxDxH)	18.4 x 54.6 x 21.6				

• Technical Specifications subject to change without notification.