





Reliable power supply solution

For energy storage and off grid solar system



CRT series is inverter combined with AC charger and auto transfer switch. It is professional solution for off grid solar system based on Low-Frequency technology. With the pure sine wave output, no matter coffee machine, microwave, TV, satellite, printer or other equipment, CRTseries inverter charger gives perfect performance of running loads from household appliances to office devices.

This multi-function inverter, combining functions of inverter, battery charger and auto transfer switch to offer uninterruptible power. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, acceptable input voltage based on different applications. CANbus communication allows the interactive controller for special applications.

#### **Product Features**

- High power factor up to 1
- Pure sine wave output for sensitive and motor loads
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc.)
- Auto switch between Utility AC and Battery with minimum 10 millisecond as UPS
- Manual switch priority power source among Solar, Utility and Battery
- Programmable AC Under-Volt(170~265VAC) shutdown to operate under weak shore power
- Gen starter gives boost signal to start backup generator for emergency
- Optimize battery by equalization function
- Support CANbus communication for special applications.

## **Application**







Mobile homes

### **Power Range**

1000 W

2000 W

3000 W

4000 W

5000 W

6000 W

8000 W

10000 W

12000 W

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Model	CRT1000	CRT2000	CRT3000	CRT4000	CRT5000	CRT6000	
Battery System Voltage	12VDC	24VDC	12/24/48VDC		24/48VDC		
AC INPUT							
Rated AC Input Voltage		230VAC ± 5%					
Selectable Voltage Range	Narrow(196~265V); Wide(177~265V); Selectable						
Frequency	Auto sense 50 / 60Hz						
INVERTER OUTPUT							
Rated Power	1000W	2000W	3000W	4000W	5000W	6000W	
Surge Power	3000W	6000W	9000W	12000W	15000W	18000W	
Waveform		Pure sine wave					
AC Voltage Regulation (Batt.Mode)	200~240VAC (Adjustable, 10V/Click)						
Inverter Efficiency (Peak)	88%	89%	88%	88%	88%	89%	
Transfer Time	10ms (UPS); 20ms (APL)						
BATTERY & CHARGING							
Bulk Charge Voltage	13.0~15.5V selectable (×2 for 24V model, ×4 for 48V model)						
Floating Charge Voltage	13.0~15.0V selectable (×2 for 24V model, ×4 for 48V model)						
Low-DC Voltage Alarm	10.5 V+/- 0.3V selectable (×2 for 24V model, ×4 for 48V model)						
Low-DC Voltage Protection	10.0 V+/- 0.3V selectable (×2 for 24V model, ×4 for 48V model)						
Charge Current	35A	35A	75/50/25A	70/35A	75/45A	75/50A	
Charge Current Adjustment	5Amp/Click						
Overcharge Protection	16.0V selectable (×2 for 24V model, ×4 for 48V model)						
Battery Type	Fast V Float V						
Gel U.S.A	14.0				13.7		
A.G.M 1	14.1 13.4						
A.G.M 2	14.6			13.7			
Seal Lead Acid	14.4			13.6			
Gel Euro	14.4			13.8			
Open Lead Acid	14.8			13.3			
Calcium	15.1 13.6						
De Sulphation	15.5 for 4 hours then off						
Lithium	14.7						
Other	Customized						
General parameter							
Operating / Storage Temp	0~40℃ /-10-50℃						
Communication	CANbus						
Working Humidity	10% to 90% relative humidity (Non-condensing)						
Cooling	Auto fan cooling						
Dimensions (D×W×H) (mm)	422×218×210 574×345×197						
Net Weight(kg)	14.7	17.5	19	30	32	34	

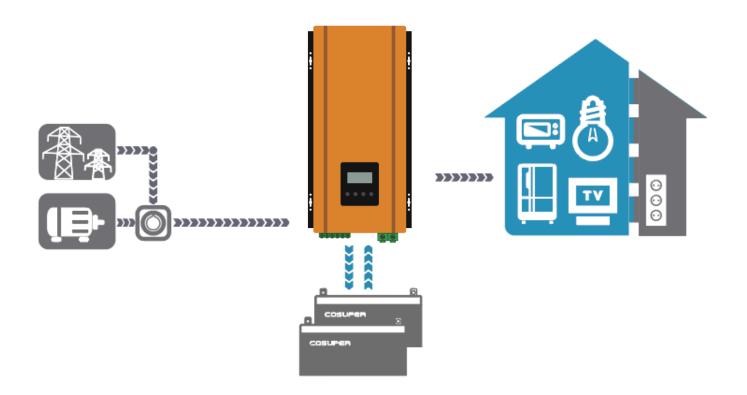




Model	CRT8000	CRT	10K	CRT12K			
Battery System Voltage			5VDC				
AC INPUT							
Rated AC Input Voltage	230VAC ± 5%						
Selectable Voltage Range	Narrow(196~265V); Wide(177~265V); Selectable						
Frequency	Auto sense 50 / 60Hz						
INVERTER OUTPUT							
Rated Power	8000W 100		00W	12000W			
Surge Power	24000W 300		00W 36000W				
Waveform	Pure sine wave						
AC Voltage Regulation (Batt.Mode)	200~240VAC (Adjustable, 10V/Click)						
Inverter Efficiency (Peak)	88%	88	88%				
Transfer Time		10ms (UPS);	20ms (APL)				
BATTERY & CHARGING							
Bulk Charge Voltage	13.0~15.5V selectable (×4 for 48V model; ×8 for 96V model)						
Floating Charge Voltage	13.0~15.0V selectable (×4 for 48V model; ×8 for 96V model)						
Low-DC Voltage Alarm	10.5 V+/- 0.3V selectable (×4 for 48V model; ×8 for 96V model)						
Low-DC Voltage Protection	10.0 V+/- 0.3V selectable (×4 for 48V model; ×8 for 96V model)						
Charge Current	35A 35A	75/50/25A	70/35A	75/45A 75/50A			
Charge Current Adjustment	5Amp/Click						
Overcharge Protection	16.0V selectable (×4 for 48V model; ×8 for 96V model)						
Battery Type	Fast V (×4 for 48V mode	el; ×8 for 96V model)	Float V (×4 for 48V model; ×8 for 96V model)				
Gel U.S.A	14.0	0	13.7				
A.G.M 1	14.	1	13.4				
A.G.M 2	14.0	6	13.7				
Seal Lead Acid	14.4	4	13.6				
Gel Euro	14.4	4	13.8				
Open Lead Acid	14.8		13.3				
Calcium	15.1 13.6						
De Sulphation	15.5 for 4 hours then off						
Lithium	14.7						
Other	Customized						
General parameter							
Operating / Storage Temp	0~40℃ / -10-50℃						
Communication	CANbus						
Working Humidity	10% to 90% relative humidity (Non-condensing)						
Cooling	Auto fan cooling						
Dimensions (D×W×H) (mm)	584×450×200						
Net Weight(kg)	65	7	0	77			







# Work with Utility/Generator and Battery connected

### **Utility Priority**

- Manually choose utility as first power priority
- Inverter runs appliances by Utility power, at the same time charge the battery bank. Charge current is adjustable from 5 amp
- Built-in AC charger gives power to battery to charge
- When Utility is not stable or failed, inverter immediately switch to battery power to provide continuous power supply

#### **Battery Priority**

- Manually choose battery power as first power priority
- Inverter runs appliances by DC power. The DC power comes both from solar chargers(not included) and battery bank
- When battery bank is running out and voltage drop to specific voltage point(set by users), inverter switch to Utility power to provide continuous power supply.