

CALTRANS TOP CHOICE

Crucial Power Product, the leader in power protection technology is located in Los Angeles California. Crucial Power Products has become a leader in the manufacture of Battery Back-up Systems (**BBS**) for Traffic Signals. With the introduction of the Signal Saver product line in 1998 Crucial Power continues to develop and manufacture real solutions for the discriminating traffic engineer's needs.

CALTRANS Top Choice is designed and manufactured in full compliance with Caltrans Battery Back-up System specification. The unit is a completely self-contained signal head power backup and flash system with internal maintenance-free AGM/VRLA batteries. It is designed to provide auxiliary AC power plus flash capability to any LED or low power signal heads, that do not exceed the published power ratings.

User Friendly

Crucial Power designs CALTRANS Top Choice systems with the traffic industry in mind. Easy installation and useful easy to read controls and indicators are a part of every system. Effective range of power ratings allow the traffic engineer to "Right Size" every intersection!

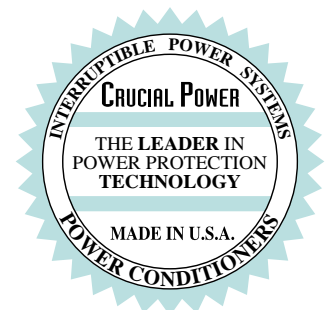
If you do not see exactly what you need, go ahead and contact Crucial Power's Application Engineering department and let us design a solution for you!

Compact Design

The unit is small and lightweight with optional hardware available that allows various mounting methods for both the control unit and the battery module.



- **Caltrans approved**
- **2 Hours of full run with programmed flash signal**
- **Shelf or Rack mountable**
- **Fits inside a Caltrans 332 cabinet**
- **Manual bypass switch external to unit**
- **Certified for operation from -35°C to +74°C**
- **Meters for accumulated runtime and event counter**
- **Temperature compensated battery charger**
- **These units can be installed in a companion, attachable, external cabinet.**



CALTRANS TOP CHOICE Specifications

Input Specification

- **Nominal Input Voltage**120 VAC single phase
- **Input Voltage Range**138 VAC to 85 VAC
- **Input Frequency**60 Hz \pm 5%
- **Input Configuration**.....2 wire (hot & neutral)
- **Input Protection**Single pole switch & inline fuse
- **Transient Protection**.....ANSI @ 62.41 IEEE 587 (A&B)

Output Specification

- **Power Rating**.....1,000 VA / 750 Watts
- **Nominal Output Voltage**.....120 VAC, 60 Hz single phase
- **Output Voltage Regulation** \pm 2% from no load to full load and from high battery to low battery
- **Output Frequency**60 Hz \pm 3Hz, compatible w/all NEMA flasher
- **Output Wave Form**.....Sine wave
- **Over Load Capability**.....125% for ten (10) minutes.
- **Fault Condition**The unit shall withstand a short circuit on any output without causing damage to the system. However a single or multiple sustained short will be fuse cleared within 20 seconds or less.
- **Efficiency**.....97%
- **Power Factor Load Capability** ..0.7 leading to unity

PHYSICAL SPECIFICATION

- **Cabinet Dimension**19" Wide x 5.1" High x 15" Deep
- **Environmental**
 - **Operating Temp.**-30°F. (-35°C.) to 165°F. (74°C.)
 - **Storage Temp.**-30°F. (-35°C.) to 165°F. (74°C.)
 - **Operating Humidity**.....0 to 95% Non-Condensing

Stable Output

Output voltage is regulated to +2% from no load to full load and from high battery to low battery. Output frequency is regulated to 60 Hz +3%, compatible with all standard traffic control units. In addition, input voltage range is 85 to 138 VAC.

Environmental Tolerance

The system is designed to operate in a wide range of environmental conditions with an operating and storage temperature range of -30°F to +165°F and operating humidity range of 0 to 95% (non-condensing).

Wide Range of Standard Features

This fully integrated system offers many standard features including PWM inverter with true sine wave output, linear temperature compensated (smart) battery charger, electronic flasher, electronic utility power line sensing, solid state control and conversion logic, front panel mounted control switches and control indicators, rear panel plug-and-play connections, and pre-wired battery module.

Options

- **Hinged Battery Box**
- **Generator Transfer Switch**

MONITORING & CONTROL PANELS



- Control Panel
- Output Fuse
- Battery Breaker
- Remote (DB9, RS232)
- Battery Connector
- Input Terminal Block
- Output Terminal Block
- Battery Run Time Meter
- Input Breaker
- Output Receptacles

Specifications are subject to change without prior notification.



SUSTAINING MEMBER



5701 Smithway St., Commerce, CA 90040
Tel: (800) 244-4069 • Fax: (800) 246-2346