



## **BATTERY** *BACKUP*

*Designed to provide hours of constant, consistent, power*

# TESCO CONTROLS MODEL 22-BBS

Fully Self-contained Battery Backup System



## FEATURES

- ☑ Retrofit and new installations
- ☑ 24V Parallel Hot Swap System
- ☑ UL 508A Procedure
- ☑ Metered combination or standalone
- ☑ Vandal Resistant

The TESCO Model 22-BBS is a self-contained traffic signal battery backup system, appropriate for retrofit projects or brand new installations. It has become the standard for hundreds of agencies and departments of transportation throughout the United States and Canada.

Our 22-BBS battery backup system is designed to provide hours of constant, consistent power through weather outages and other disturbances, delivering safety for drivers and law enforcement officials under previously hazardous conditions.

TESCO manufactures many different BBS models, each meeting our customer's needs due to varying municipal and DOT standards such as the Model 24-200 dual meter BBS system, and the Model 27-22 back-to-back metered service pedestal and BBS system. Of course, all of them are constructed with the renowned TESCO standard of quality with features like NEMA rated cabinets, UL 508A design, all-welded aluminum construction with stainless steel hardware and wired to conform to NEMA, NEC and UL standards.

Call Tesco Controls or visit our website at [www.TescoControls.com](http://www.TescoControls.com) today to schedule a demonstration and discover how you can rid your area of unneeded, unnecessary and unsafe traffic signal power outages.

**TESCO**  
CONTROLS, INC.

O 916.395.8800 Ext. 2167  
C 916.765.0523  
F 916.403.0013

8440 Florin Road  
Sacramento, CA 95828  
[www.TescoControls.com](http://www.TescoControls.com)

**Curt Vasey**  
National Sales Manager  
Transportation Division  
[cvasey@tescocontrols.com](mailto:cvasey@tescocontrols.com)



## UPS Panel Features

- ✓ Retrofit and new installations
- ✓ Pad mounted enclosures
- ✓ Metered or unmetered applications
- ✓ Compact design with ambient enclosure compensation
- ✓ UPS Tilt-out housing for ease of maintenance
- ✓ Seismic-rated framed battery shelf
- ✓ Safety dead front panel
- ✓ Components wired and conforming to NEMA, NEC and UL standards
- ✓ Optional Gen Set with available automatic / manual transfer switch
- ✓ Tool-free maintenance and component replacement

## UPS System Features

- ✓ 2000VA / 1300 Watts Standard
- ✓ Typical run time 6 to 12 hours full operation, based on actual load  
- all LED inter-section (Additional times available)
- ✓ 8 hour recharge time to 90%
- ✓ Full power bypass and isolation switches
- ✓ True pure sine wave
- ✓ Transient voltage protection
- ✓ Smart Power Analyzer with triple redundant bypass
- ✓ Conditioned power
- ✓ Power Conflict Monitor with isolation and transfer module
- ✓ Timer with redundant 5 ms delay and hard transfer to utility power
- ✓ Smart slot communications I/O module
- ✓ RS-232 and USB ports for local or remote monitoring
- ✓ Intelligent battery management system with microprocessor controlled smart battery charger, automatic self-test, cell guard for longer life and faster recharge times
- ✓ Optional IP addressable web SNMP communications.
- ✓ 24V 18AH batteries AGM/VRLA (absorbed glass mat/valve regulated lead acid) compact, lightweight only 26 lbs
- ✓ Quick hot-swappable battery replacement system
- ✓ Heavy duty smart safety battery connection system, 50A silver plated plugs
- ✓ Manufacturer's 2 year warranty

## Cabinet Construction

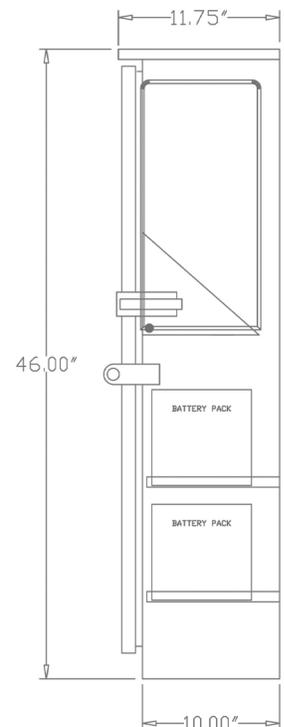
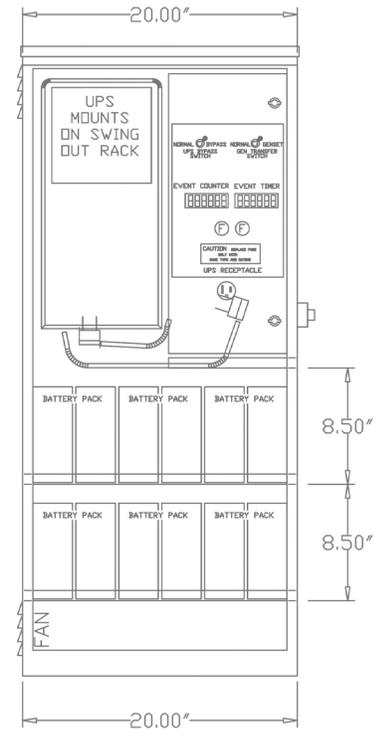
- ✓ Cabinet is all welded construction, fabricated from stainless steel, anodized or powder-coated aluminum. Rated weatherproof NEMA 3R.
- ✓ All fasteners, latches, hinges, and hardware are stainless steel
- ✓ There are no exposed nuts, bolts, screws, rivets, or other fasteners on the cabinet exterior
- ✓ Cabinet door is fully framed continuous hinge with swaged close tolerance sides for flush fit with top drip lip and closed cell neoprene flange compressed gaskets
- ✓ Dimensions and construction will match existing service pedestal
- ✓ UL 508A industrial control panel design
- ✓ Vandal proof construction with vandal proof doors and hasp stress rated to 2000 lbs
- ✓ Each cabinet is factory wired and tested before shipment
- ✓ Ambient temperature enclosure compensated
- ✓ No exposed nuts, bolts, screws, rivets or fasteners on exterior of enclosure



# TESCO CONTROLS MODEL 22-BBS

## SPECIFICATIONS

Transfer Time (typical)	<2-4 ms, includes detection time
Transfer to Flash	On Battery
	Low Battery
	Timed Output
On-Battery Output Voltage	True pure sine wave output at 120 VAC +/-5%, -10% after low battery warning, synchronized to utility line.
Capacity (Volt-Amps Watts)	2kVA, 1300 watts
Surge energy rating peak current capability	480 J, 6.5kA
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.3% of peak typical
Audible noise at 3.3 ft.	<45dBA
Normal common mode clamping response time	0 ns, <5ns typical, meets UL 1449
Batteries	Compact, sealed, maintenance-free lead acid individually fused.
Online Battery Replacement	Quick swap with 50 amp Anderson connectors
Recharge time to 90% capacity	8 hours
Ambient Operation	10,000 ft. max. Elevation 0-95% humidity non-condensing -34°F to +165°F (-37°C to +74°C) (Optional adder)
Temperature Tested Electronics	To 170°F
Conditioned Power	Computer quality conditioned power
UL Design	Yes
Transient Lightning Protection	160 Joules
Full Power Bypass & Isolation Module	SPACT and PCM for full triple redundant bypass and isolation
Extended runtime battery pack options	6 batteries standard, additional options available
Replacement Battery Cartridge	RBC7



**Tesco Controls, Inc.**

8440 Florin Road | Sacramento, CA 95828 | (916) 395-8800 | [www.TescoControls.com](http://www.TescoControls.com)