

an EnerSys® company

Alpha® Traffic Mini BBS

Battery Backup Systems



- Consolidated battery backup system (BBS) designed to power ATC, NEMA M, P & 336 (or similar style) traffic controller cabinets
- Ideal solution for space constraint applications providing >4 hours of battery runtime*
- Self-contained UPS, factory wired, tested and ready to install, reducing installation time and cost**
- Alpha's "No Worries" 5 Year Warranty full replacement with AlphaCell™ 100XTV batteries
- Compact, integrated 350W or 1000W battery backup system, utilizing the same design and similar features of the highly successful and reliable FXM series UPS

Alpha® Traffic Mini Battery Backup Systems (BBS) is a rugged enclosure made of 0.125" aluminum and designed to easily accommodate an Alpha® uninterruptible power supply, Universal Automatic Transfer Switch and up to four AlphaCell™ 100 XTV or two 195/240 XTV's.

The Traffic Mini BBS is an outdoor-rated (NEMA 3R) enclosure. Features include: drop down lift off door, Type 2 Corbin lock, integrated document holder, tamper switch, wide range Automatic Voltage Regulation (AVR), remote monitoring/control and temperature compensated battery charging for extended battery

life. The Alpha® Traffic Mini BBS provides constant, reliable backup power for Traffic, ITS, Access Control, Security, Public Utility and Telecommunications applications in a compact, all-in-one enclosure. The system provides the same functionality as the Alpha class leading FXM Series, for lower power space constraint applications, in a single easy to install cabinet with a favorable curb appeal.

^{*}Runtime calculated with 450W resistive load with 4 x AlphaCell 100 XTV at $25\,^{\circ}\text{C}$

^{**}Excluding batteries

Alpha® Traffic Mini BBS Battery Backup System

Standard Features

- Integrated solution with uninterruptible power supply module, Universal Automatic Transfer Switch, document holder, battery cable kit and tamper switch
- Two shelves for up to four AlphaCell™ 100XTV or two 195/240 XTV batteries
- Can house optional Alpha® Remote Battery Monitoring system
- Mounting options include pole, wall, side or pedestal

Model	Traffic Mini 350 BBS	Traffic Mini 1000 BBS
Part Number	0170021-040	0170021-010
Electrical		
System Input Voltage:	120VAC	
Input Current Rating*:	5.3A	14A
Input Frequency:	50/60 Hz ±5% (Autosense)	
AVR Range:	88-152VAC	85-169VAC
System DC Voltage:	24VDC	48VDC
Max Charge Current:	6A DC	10A DC
System Output Voltage:	120 VAC	
Output Power@ 50°C:	350W	1000W
Output Frequency:	= Input Frequency	
Output Voltage Regulation:	±10% Line Mode ±2% Inverter Mode	
Output Waveform:	Pure Sine Wove	
Mechanical		
Dimensions:	inches: 34H x 16W x 12D mm: 864H x 406W x 305D	
Weight (w/o Batteries):	55lbs (25kg)	65lbs (29.5kg)
Construction:	Aluminum, 5052-H32 (High strength corrosion resistance)	
Finish:	Natural Aluminum	
Cable Entrance:	Bottom or Rear	
Mounting:	Side mount, Optional - wall, pole or pedestal kit available	
Access:	Removable bottom shelf for easy wiring access	
AC Input Connections AWG:	Terminal blocks #14 to #6 AWG (2.08 to 13.3 mm²)	
AC Output Connections AWG:	Terminal blocks #14 to #6 AWG (2.08 to 13.3 mm²)	
Dry Contact AWG:	Terminal blocks #26 to #12 AWG (0.2 to 2.5 mm²)	
Communication Interface		
Display:	2 x 20 backlit alpha-numeric LCD	
Ports:	USB-B: Local Communication RJ45: Remote Communication RJ11: Battery Temperature Compensation	RS232: Local Communication RJ45: Remote Communication RJ11: Battery Temperature Compensation
Indicators:	Green and Red LED's Solid Green: Line Mode Flashing Green: Inverter Mode Flashing Red: Alarm Solid Red: Fault	
Dry Contact:	2 x Programmable NO/NC (250VAC, 1A), 2 x user inputs	5 x Programmable NO/NC (250VAC, 1A), 1 x 48VDC/500mA, 3 x user inputs, 1 x ATS



Alpha® Traffic Mini BBS Battery Backup System

Model	Traffic Mini 350 BBS	Traffic Mini 1000 BBS
Part Number	0170021-040	0170021-010
Environmental		
Temperature:	Operating: -40 to 74°C (-4 to 165°F)** Storage: -40 to 75°C (-40 to 167°F)	
Relative Humidity:	Up to 95%, non-condensing	
Altitude:	Operating: Up to 2000 m (6562 ft) above sea level	
Performance		
Typical Output Voltage THD:	<3% (resistive load)	
Typical Efficiency***:	Line Mode > 96% Inverter Mode > 82%	Line Mode > 92% Inverter Mode > 82%
Load Crest Factor:	3:1 (load dependent)	
Agency Compliance		
Electrical Safety:	UL1778, CSA 22.2 No 107.3, UL 60950-1, CSA-C22.2 60950-1	
Marks:	C Us	
EMC:	CFR47, Part 15 Subpart B, Class A; CES-003 Class A	
NEMA:	3R	

Standard System Configuration

0.125" Thick Natural Aluminum Enclosure 350 or 1000W UPS Module Universal Automatic Transfer Switch Battery Cable Kit - 1/4" Ring Lug

Document Holder Tamper Switch

ADD AlphaCell Batteries - $4 \times 100 \ \text{XTV}$ (Mini 1000 BBS) or $2 \times 195/240 \ \text{XTV}$ (Mini 350 BBS)

Optional Accessories

- Remote Battery Monitoring System
- Battery Heater Mats
- Mounting Brackets Pole or Wall
- Pedestal Mounting Kit

 $^{^{\}star}$ @ nominal input voltage and maximum battery charging current

^{**}Power module only. Output power derates above 50°C

^{**}Efficiency is measured at an ambient temperature of 25°C, full resistive condition and nominal line and battery voltage