



# BATTERY BACKUP UNIT

## UNINTERRUPTIBLE POWER SUPPLY



# DESIGNED WITH YOU IN MIND

## OBT-UPS-2001

OB Traffic is proud to present our brand new BBU. We designed the OBT-UPS-2001 our customers in mind. Taking into account your safety and the cumbersome installation process, we closed off the back panel. **For the first time, all wiring is accessible on the front of the unit.** Never again will you have to pull the unit to gain access. The OBT-UPS-2001 is suitable for a widely diverse environment, able to withstand the most severe weather conditions, with temperatures ranging from **-37°C to +75°C**. Not only does the OBT-UPS-2001 back up power to traffic control and signal equipment, it fits in all types of traffic enclosures. In addition, the OBT-UPS-2001 can be mounted in an electrical service or custom pedestal. Our BBU has a Low harmonic AC sinewave output, with fully programmable AC threshold voltages, and transient voltage protection from damaging line spikes.



Six fully programmable dry contacts. Provides greater control of system components and functions.



Back-Light display and 2 LEDs indicator.



Time / Date stamp of Events and Alarms. Up to 100 events via Download and Print Capability. Programmable Email and SMS alerts.



Remote Access via RS-232 USB, and Ethernet RJ-45.



Temperature-Compensated Charging. Maximizes Battery Life in harsh environments.

# SPECIFICATIONS

**MODEL #: OBT-UPS-2001**



<b>INPUT</b>	<b>Normal Voltage</b>	120 VAC +/- 25%	<b>OUTPUT</b>	<b>Power (Continuous rating)</b>	2000 VA / 1500 Watts (below +65 deg. C), Above +65 deg. C unit derated to 1500 VA/ 1200 Watts respectively.	<b>CHARGER</b>	<b>Nominal Voltage</b>	48 VDC
	<b>Transfer Voltage (Line to Battery)</b>	Values programmable within 120 VAC +/- 25% range (Default values 100 VAC = Low Line, 130 VAC = High Line)		<b>Power factor</b>	0.75		<b>Current</b>	10 Amps DC, Adjustable
	<b>Retransfer Voltages (Battery to line)</b>	Values programmable within 120 VAC +/- 25% range (Default Hysteresis 105 VAC=Low Line, 125 VAC = High Hysteresis)		<b>Voltage</b>	120 +/- 10% VAC, Battery Mode, 120VAC +/-25%, Line Mode (depend on item 1.2) 120 +/- 10% VAC, Buck/Boost Mode (depend on item 1.6 and 1.7)		<b>Temperature Compensation</b>	External, pluggable sensor, 2 meters long wires, compensation of -3,-4 and -5 mV/deg C/ cell over -37 to +50 deg C range, via 3 pin mat-n lock type socket on the front panel
	<b>Boost Range</b>	Values programmable within 120VAC - 20% range with a 15% step (Default values DISABLE)		<b>Voltage THD (Total Harmonics Distortion)</b>	<5%, UPS on battery, 100% resistive load		<b>Charging Rate</b>	1.75 volt / cell min (ambient temperature variable charging rate)
	<b>Buck Range</b>	Values programmable within 120 VAC +20% range with a 15% step (Default values DISABLE)		<b>Frequency Line Mode</b>	60 +/- 3 Hertz (depend on item 1.9)		<b>Low Battery Shutdown</b>	Value programmable in 0.1 VDC increment over 42 VDC range for the relay contact at Green TB2
	<b>Normal Frequency</b>	60 Hertz		<b>Frequency Battery Mode</b>	60 +/- 0.5 Hertz		<b>Low Battery Alarm</b>	Value programmable in 0.1 VDC increment over 42 to 50 VDC range for the relay contact at Green TB2
	<b>Frequency Fail Detection (Transfer from Line to Battery)</b>	Values programmable within 60 +/- 5 Hertz range (Default values <57 and >63 Hertz)		<b>Current</b>	25 Amps max		<b>Charging Shut Off</b>	Above 50 degrees C
	<b>Frequency Fail Recover (Retransfer to Line from Battery)</b>	Values programmable within 60 +/- 4 Hertz range (Default values 60 +/- 1% Hertz)		<b>Connection</b>	Dual 3 position Terminal Block. Type: WECCO 324 - HDS.		<b>BATTERY</b>	<b>Voltage</b>
	<b>Current</b>	30 Amps Max		<b>Protection</b>	30 Amps Circuit Breaker and fast electronic shutdown	<b>Battery Protection</b>		60 Amps Circuit breaker with finger guard
	<b>Optional Source</b>	AC Generator of size 1.5 x load, with voltage and frequency variation with slower detection and less sensitivity, DC Generator for continuous inverter operation		<b>Dielectric</b>	1240 VAC/1340 VDC for 1 minute, L-G / N-G	<b>Connection</b>		Anderson PP75 connector
	<b>Efficiency</b>	95% in the Line Mode at 1.0 PF Full Load, with fully charged batteries		<b>Transfer Time (Line to Battery)</b>	6 ms, typically	<b>Efficiency</b>		80% in battery Mode
	<b>Connection</b>	One 3 position Terminal Block		<b>Retransfer Time (Battery to Line)</b>	6 ms, after wait time of either 30 or 10 or 3 seconds (programmable)	<b>Test Jacks</b>		One Red and One Black Test Jacket (Banana type) sockets to test battery Voltage
	<b>Protection</b>	30 Amps circuit Breaker		<b>Crest Factor: Current</b>	3:1	<b>ENVIRONMENTAL</b>		<b>Operating Temperature</b>
	<b>Surge Protection</b>	ANSI/IEEE C 62.41, Category A (2KV), 1.2 x 50 usec. Combination type 50 pulses min. @10 sec. interval		<b>Waveform</b>	Sine Wave		<b>Storage Temperature</b>	(-) 50 to (+) 80 degrees C
<b>MECHANICAL</b>	<b>Weight</b>	20 kg	<b>COMMS PORT</b>	<b>Ethernet</b>	10/100 Ethernet Webcard/SNMP Port		<b>Relative Humidity</b>	0 to 95% Non-Condensing
				<b>Alarm/Event Log</b>	Have min. 100 last events		<b>Audible Noise</b>	<60 dBA
				<b>USB Port</b>	USB V1.1, Connector type: B female	<b>Cooling</b>	Forced air with Thermostatically controlled fan	
				<b>RS232 Port</b>	Pin 6 = Rx = Receives data from PC, Pin 9 = Tx=Transmits data to PC Pin 7 = GND = Ground for Rx and Tx signals	<b>Altitude</b>	12,000' / 3600 meter, Derate Operating Temperature by 2 deg. C/1000 ft (300m), above 5000 ft. (1530 m)	
				<b>Mounting</b>	Shelf Mounted Horizontal or Vertical, 19" or 23" Rack Mount, Rack Ears & 10/32 hardware optional	<b>Size W x D x H mm</b>	432 x 254 x 133	