



# Emergency Battery System

# XL243A

Securaplane's Sealed Lead Acid XL243A emergency battery system has been designed to function as an uninterruptable power supply to support a Windows NT cabin file server. Featuring field proven sealed lead acid batteries, battery level test, and built-in precision charging system, the XL243A series is the answer for aircraft operators demanding low battery maintenance.

The XL243A supplies two outputs. Output 1 provides 18 to 32 VDC at 2 amperes and output 2 provides 12.5 VDC at 3 amperes. "Power Failure" and "Low Battery" information are communicated to the server from the XL243A through RS-232 compatible signals and "UPS Shutdown" may be transmitted to the XL243A at the end of Windows NT shutdown.

## Advantages

- Built-In Test Equipment
- No Deep Cycling
- No "Memory" Characteristics
- Inexpensive Battery Replacement
- Full 3 Year Warranty on Batteries
- Full 5 Year Warranty on Electronics
- **No Need to Remove for Capacity Check**

## Applications

- IRS/INS/3<sup>rd</sup> Standby Attitude Reference System Back-up Power
- Emergency Lighting
- Cabin File NT server

## Batteries

Sealed Lead Acid Hawker "Cyclon" Batteries (Dry Cells); 18-24 VDC Output, 1.9 amps at 1 hour discharge rate; 2.5 amps at 45 minute discharge rate, 0.48 amps at 5 hour discharge rate.

## Built-in Battery Charger

Precision charges battery from aircraft 28 VDC power bus. Operates in bulk, topping, and trickle modes. Battery will reach 80-90% energy capacity in less than one hour. Contains overheat protection, charge monitoring (at unit front panel), and overload protection.

## Battery Test

Battery test function places a known load on the battery and measures battery voltage. The front panel LEDs indicate "Batt Low" at energy levels at or below 65%, and "Batt OK" above 65%. **No need to remove from aircraft to perform capacity check.**

## Outputs

The XL243A provides two outputs:

- Output 1: 18 to 32 VDC at 2 amperes.
- Output 2: 12.5 VDC at 3 amperes.

**No need to remove from aircraft for capacity test**



Information is subject to change. Please contact Securaplane for current information.



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## Physical Characteristics

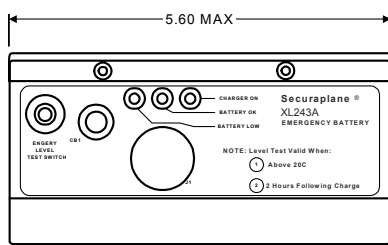
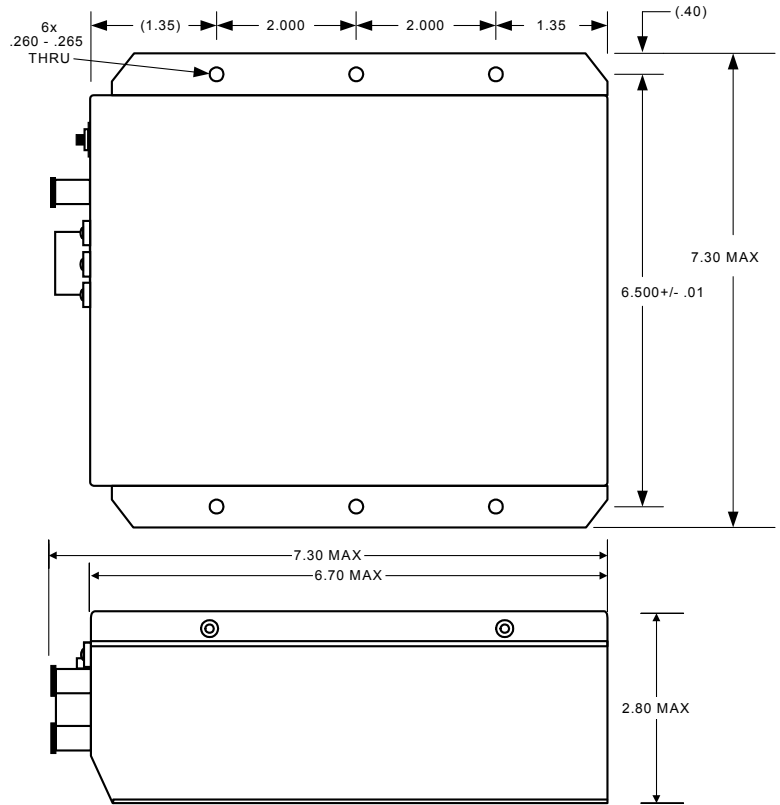
**Size:** 7.30 inches long, 5.60 inches wide (plus 0.85 inch mounting flange on each side), 2.80 inches high.

**Connector:** MS3122E14-12S

**Qual:** (DO-16OD) 4(F2), 5(B), 6(B), 7, 8(C), 13(F), 15(A), 16(Z), 17(A), 18(Z), 19(Z), 20(R), 21(M), 22(A3XX), 25(A)

**Weight:** 7.5 lbs. max.

**Transportation:** Dry cell classification by DOT.



## Functional Characteristics

**Input Power:** 18-32 VDC (28 VDC nom.), 10A max. at 25 VDC input. (Charger + Output 1 load + Output 2 load).  
Unit will not be damaged by input voltages between 0 and 36 VDC.

### Rated Outputs when on Aircraft Bus Power:

- Output 1:  $V_{in} - 0.6$  VDC, 2.0 Amperes
- Output 2: 11.7-13.3VDC, 3.0 Amperes

### Rated Outputs when on Battery Power:

- Output 1: 18-26 VDC, 2.0 Amperes
- Output 2: 11.7-13.3VDC, 3.0 Amperes

### Discharge Time for Fully Charged Batteries:

- Minimum 10 minutes from "transfer to battery" to "battery low" signal (outputs remain on).
- Minimum 20 minutes from "transfer to battery" to battery cutoff (outputs turned off).

### Signal Outputs (RS-232 Compatible):

- Power Failure signal activates (high = true) when input bus drops below 25 VDC (unit has transferred to batteries).
- Battery Low signal activates (high = true) when battery voltage drops below 22 VDC (outputs remain on).

### Signal Inputs (RS-232 Compatible):

- UPS Shutdown signal (low or floating = shutdown) disconnects batteries from load.