



Emergency Battery System

XL244 Series

Securaplane's Sealed Lead Acid XL244 series emergency battery system has been designed as a direct replacement for the JET. Electronics Emergency Battery Series P5-823 and PS-835. Featuring field-proven sealed lead acid batteries, battery level test, and built-in precision charging system, the XL244 series is the answer for aircraft operators demanding battery maintenance reduction. Sealed Lead Acid (SLA) Batteries provide longer life and better reliability than Ni-Cads in emergency backup (float) power applications, especially in an elevated temperature ambient.

Options for the X1244 series include a 115 VAC, 400 Hz, 3-phase inverter or a 115 VAC, 400 Hz, single-phase inverter.

Direct Replacement for PS-823 and PS-835

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/3rd Standby Attitude Reference System Back-up Power
- Emergency Lighting
- Bus "hold-up" during engine start

Batteries

Sealed Lead Acid Hawker "Cyclon" Batteries (Dry Cells); 18-24 VDC Output, 3.7 amps at 1 hour discharge rate; 4.5 amps at 45 minute discharge rate, 0.85 amps at 5 hour discharge rate.

Built-in Battery Charger

Precision charges battery from aircraft 28 VDC power bus. Operates in conditioning, bulk, topping, and trickle modes. Battery will reach 80-90% energy capacity in 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 temperature. A BIT output and the front panel LEDs indicate "Batt Low" at energy levels at or below 71%, and "Batt OK" above 71%. No need to remove from aircraft to perform capacity check. The battery test function can be initiated via cockpit mounted test switch or the XL244 front panel switch.

Environmental Control

In cold ambients, a thermal blanket automatically activates to heat the battery to 30°C for guaranteed maximum energy.

Instrument Lighting Output

The XL244 incorporates a separate, factory adjustable converter output (2.0 to 7.0 VDC, 10 Watt) suitable for cockpit lighting applications.



XL244 Series

Physical Characteristics

Size: ARINC 404, ¼ ATR — 7.62 x 2.3 x 14.11 inches (max)

Connector: ARINC 404 DPXB-13-34P-0101

Qual: (DO-16OD) 4(F2), 5(B), 6(C), 7, 8(C), 10(W), 12(D), 13(F), 14(S),
15(Z), 16(Z), 17(A), 18(Z), 19(Z), 20(R and W), 21(Z),
22(B3XX), 24(A)

Weight: 12.5 lbs. max. (XL244A), 14.0 lbs. max. (XL244B, XL244C)

Transportation: Dry cell classification by DOT.

Functional Characteristics

Input Power: 18-36 VDC (28 VDC nominal), 15A max.
(Charger + Lighting + Heaters)

Battery Output at 18-24 VDC: 3.7 amps at 1 hour discharge rate;
4.5 amps at 45 minute discharge rate,
0.85 amps at 5 hour discharge rate.

Lighting Converter Output: Factory adjustable 2.0 to 7.0 VDC, 10 Watt.

Signal Input: Cockpit test switch initiates battery capacity test from cockpit.

BIT Output: Indicates battery energy level above 71%.

Application List

The **XL244A** incorporates no AC auxiliary outputs, and has a chamfer feature at the rear of the chassis similar to the J.E.T. PS-835 with no plug-in module installed. The **XL244B** has a 3-phase AC output with a 26 VAC auxiliary output. The **XL244C** has a single-phase AC output with a 26 VAC auxiliary output. All three units have an adjustable 5 volt DC output for lighting. The XL244 series are designed to replace the JET. Electronics Emergency Battery models listed below.

J.E.T. Battery Model Number	Securaplane Part Number	Securaplane Model Number
PS-823A	100-1067-02	XL244B
PS-823AT	100-1067-02	XL244B
PS-82313	100-1067-02	XL244B
PS-823BT	100-1067-02	XL244B
PS-823C	100-1067-02	XL244B
PS-823CT	100-1067-02	XL244B
PS-823D	100-1067-02	XL244B
PS-823DT	100-1067-02	XL244B
PS-835A	100-1067-01	XL244A
PS-835B	100-1067-01 (Note 1)	XL244A
PS-835C	100-1067-01	XL244A
PS-835D	100-1067-01 (Note 1)	XL244A
PS-835E	100-1067-01	XL244A
PS-835F	100-1067-01 (Note 1)	XL244A
PS-835A with SI-100A module	100-1067-02	XL244B
PS-835B with SI-100A module	100-1067-02 (Note 1)	XL244B
PS-835C with SI-100A module	100-1067-02	XL244B
PS-835D with SI-100A module	100-1067-02 (Note 1)	XL244B
PS-835E with SI-100A module	100-1067-02	XL244B
PS-835F with SI-100A module	100-1067-02 (Note 1)	XL244B
PS-835A with SI-100B module	100-1067-03	XL244C
PS-835B with SI-100B module	100-1067-03 (Note 1)	XL244C
PS-835C with SI-100B module	100-1067-03	XL244C
PS-835D with SI-100B module	100-1067-03 (Note 1)	XL244C
PS-835E with SI-100B module	100-1067-03	XL244C
PS-835F with SI-100B module	100-1067-03 (Note 1)	XL244C

Note 1: The XL244 series is rated at 4.5 ampere-hours. The PS-835B, PS-835D, and PS-835F are rated for 5.0 ampere-hours. Please verify the DC load requirements of the intended application to determine suitability of the XL244