



## Integrated Back-up Battery System

Back-up power you can count on for critical avionics.

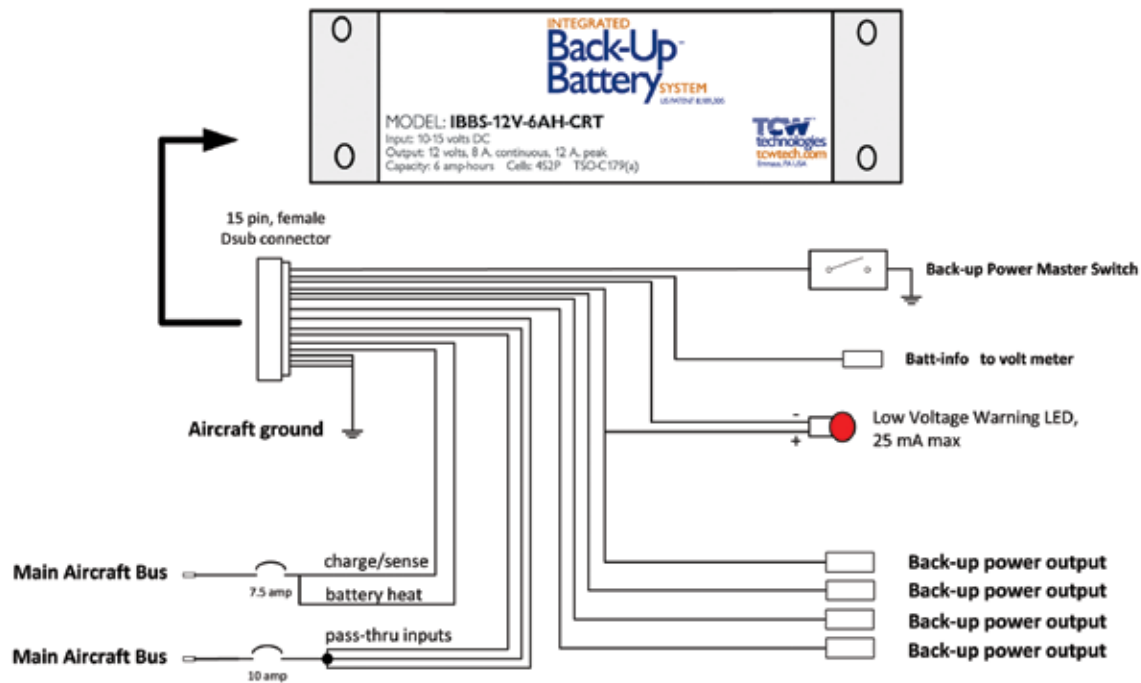
The **Integrated Back-up Battery System** provides back-up power to critical electronics such as EFIS, GPS, Navigators, Radios, Autopilots and Engine monitors. The IBBS is an fully automatic system that combines a Li-Fe-PO4 battery pack, a smart charger and switching logic in one convenient package. The IBBS provides an engineered solution to enable an endurance

bus for critical electrical loads found in today's aircraft. It simplifies wiring and installation of a source of back-up power by integrating all the key elements into a single enclosure.

The IBBS system is an FAA approved article produced exclusively by TCW Technologies, LLC under TSO-C179(a). Compliant with DO-311 & DO-160.

### Features and benefits

- **3 amp-hr** and **6 amp-hr** models
- High performance integral charger
- **FAA approved article**
- Safe, reliable Li-Fe-PO4 chemistry
- Critical backup power
- **TSO-C179(a)**
- Fully automatic operation.
- Designed and Assembled in USA
- DO-311, DO-160(f)
- US Patent 8,189,305



## Specifications

	IBBS-12V-3AH-CRT	IBBS-12V-6AH-CRT
INPUT VOLTAGE	13.5 – 15 volts DC for battery charging.	13.5 – 15 volts DC for battery charging.
TRANSITION VOLTAGE*	10.5 – 11.5 volts	10.5 – 11.5 volts
INPUT CURRENT	2.5 amps max continuous on main input for charging 0.8 amps max for battery heater at low temps	4.0 amps max continuous on main input for charging 1.5 amps max for battery heater at low temps
PASS-THRU CURRENT	5 amps continuous, 10 amps peak (30 seconds)	8 amps continuous, 12 amps peak (30 seconds)
OUTPUT VOLTAGE	10 – 14 volts DC during back-up operation	10 – 14 volts DC during back-up operation
OUTPUT CURRENT	5 amps continuous, 10 amps peak, transient load (30 second duration max)	8 amps continuous, 12 amps peak, transient load (30 second duration max)
BATTERY	Internal sealed Li-Fe-PO4, nominal 12.8 volts	Internal sealed Li-Fe-PO4, nominal 12.8 volts
CHARGER	Integral high performance fast charger with cell balancing and thermal monitoring	Integral high performance fast charger with cell balancing and thermal monitoring
SURGE PROTECTION	34 volt active clamp, 1500w 10/1000uS waveform	34 volt active clamp, 1500w 10/1000uS waveform
WIRING	15 pin male D-sub on product.	15 pin male D-sub on product
ENCLOSURE	Aluminum 7.7" x 2.3" x 1.6"	Aluminum 7.7" x 2.3" x 2.65"
WEIGHT	18 oz.	34 oz.
TEMPERATURE RANGE	Operating – 10 C° to 60 C°; Charging – 40 C° to 40 C°	Operating – 10 C° to 60 C°; Charging – 40 C° to 40 C°
CONNECTOR	Standard density 15 pin D-sub, male on product	Standard density 15 pin D-sub, male on product

\*transition voltage is the voltage level on the input (pin 5) that causes the system to provide output power via the internal back-up battery 7.5



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