



3.2 Ah RECHARGEABLE LITHIUM ION POLYMER **SMART BATTERY**

DESIGNED FOR MISSION CRITICAL APPLICATIONS

INVOCON, INC.

TECHNOLOGY PROFILE 01/15

The Invocon **28V Rechargeable Smart Battery** uses modern lithium ion polymer battery technology. Lithium ion polymer batteries have one of the **highest energy storage and power delivery** densities (per weight) of modern batteries. This enables longer operation between charging and dependable operation of high current electrical loads or inrush currents without startup sequencing. Li-poly batteries require control circuitry to **manage the charging and discharging profiles**. This circuitry is built into the battery system to make it "smart", allowing for direct replacement of simple older batteries without upgrading to special chargers. The Invocon Smart Battery is designed for mission critical applications. Custom circuitry, without a single point failure, provides uninterrupted power discharge for mission critical applications such as flight termination systems. A **microprocessor** continuously measures key battery parameters and provides this information on communication ports. Additionally, **State of Charge (SOC)** and **State of Health (SOH)** are continuously calculated so you always know the condition of the batteries in order to insure sufficient mission power and reliability. The battery is Qualified to RCC 319-07 (call for details on specific mission FTS Qualification).



Specifications at 25 degrees C

<u>Electrical</u>	
Battery Chemistry	Lithium Ion Polymer
Nominal Capacity @ 1C discharge	3.2 Ahr
Discharge voltage range	32 - 22.5 VDC
Charging voltage	35 - 38 VDC
Continuous discharge current	10 Amps
Connector	Amphenol 38999 JT07RT-10-35S(023) (13-pin)
Communications Interface	Ethernet (422 option)
Data	Battery voltage, cell voltages, pack current, state of charge, state of health, pack temperature
<u>Mechanical</u>	
Size (L x W x H)	6.8 x 2.2 x 3.5 inches
Weight	3.4 Lbs.
Case material	6061 aluminum, Alodine coated
<u>Environmental</u>	
Operating Temperature	-24° to 71° C
Charge Temperature	0° to 45° C
Storage Temperature	-24° to 71° C
Shelf Life - low power mode	3 years