Electro-Explosive Device (EED) Controller

Description

The Electro-Explosive Device (EED) Controller is suitable for use on Aerial Targets and UAV’s to enable the orderly deployment of the parachutes in order to safely recover the vehicle. The unit provides timing circuits for recovery system arming, the main parachute deployment delay, and automatic and commanded recovery sequences. It controls power to the explosive cartridges used to deploy and release the parachute and tow target systems and deactivation of power to the avionics suite. The EED utilizes the latest modem devices and circuitry to provide reliable a product with an extremely long operating life.

Features

- Field Proven Hardware
- Operates with 28 VDC input and 12 VDC input from Power Management Unit (PMU)
- Receives Drogue Deploy from PMU
- Receives Loss of Command Present signal from Integrated Flight Controller (IFC)
- Receives Emergency Parachute Activation from IFC

Applications

- Vehicle Recovery System

Export Sales of this product are subject to U.S. Government approval. Sales will not be approved to countries prohibited by the International Trade in Arms Regulations (ITAR)
Technical Specifications

Characteristics

- **Input Voltage Range:** 24 VDC to 32 VDC (28 VDC Nominal) and 12 VDC +/- 1 VDC
- **Power Consumption:** <1 amp @ 28 VDC
- **Temperature:** Operating: -40°C to +71°C Storage: -54°C to +125°C
- **Cooling:** Passive Conductive (no moving parts)
- **Vibration:** Operating, Random, 10 G_{RMS}
- **Shock:** Half Sine, 20 G’s peak, 11 ms, 3 axes
- **Altitude:** Up to 50,000 feet

Capabilities

- **Recovery Initiation:**
  - Emergency Parachute Release: Manual activation for the recovery and tail cone release sequence
  - Command Signal Loss: Automatic recovery sequence initiation upon Loss of Command (IFC OK)
  - Low Voltage: Automatic recovery sequence initiation upon detection of a low voltage of 22 +/- 1 VDC
  - Drogue Deploy: Automatic recovery sequence initiation upon Loss of regulated 15 VDC power or 28 VDC
- **Recovery Arm (Telemetry)**
  - The downlink telemetry data for the recovery arm: 3.5 +/- VDC
- **Provides switched power to:**
  - Orderly activation of the Squibs, Bag Line Cutters, and Chute Release Circuit armaments
  - Organized chute release switch activation, chute release Squib firing, and final deactivation of the power to the avionics components of the vehicle

Physical

- **Size:** 9.30” W x 4.125” T x 2.51” D
- **Weight:** 3.5 pounds
- **Installation:** Flange Mount Base Plate

Contact us for custom modifications

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AS9100C and ISO 9001:2008 Certified

Specifications subject to change without notice