

FLIGHT TERMINATION SYSTEM MULTI-VEHICLE DATA SHEET & TECHNICAL SPECIFICATIONS



Features

- ▶ EIA 19" Rack Components
- ▶ Independent Control of up to 2 vehicles
- ▶ RF Power Output of 200 Watts
- ▶ IRIG 313-01 Compliant
- ▶ MONITOR, ARM and DESTRUCT Command
- ▶ Switches
- ▶ Safety wire switch protection caps
- ▶ Universal AC input power

Applications

- ▶ Range Safety
- ▶ Test

The 200W Dual Vehicle FTS was specifically designed for use with Unmanned Aerial Vehicles (UAV's), missile systems and aerial target drones and is currently in operation supporting various missions worldwide. Designed to be IRIG 313-01 and 319-07 compliant, it is a rack mount unit used for flight termination and command. The unit accepts AC power and generates a modulated RF output FM signal suitable for interrogation of flight termination receivers such as the Herley HFTR60 and a variety of command receiver/decoders.

The 200W Dual Vehicle FTS features two sets of command switches on the front panel for MONITOR, ARM, and DESTRUCT to provide quick and easy emergency control of up to two vehicles in flight. All command switches have protective switch covers to prevent unintentional command initiation. A battery backup module capable

of providing back up power for up to 15 minutes can also be added to the system. From the control panel the operator can monitor command status indicator lamps and there is also a panel meter for monitoring AC input power.

The 200W Dual Vehicle FTS internally generates command tones that modulate the synthesized RF carrier to produce a 200 Watt (minimum) RF output. Upon power up, the system will immediately transmit the carrier frequency and will continue to do so until the DESTRUCT command is issued. The MONITOR and ARM switches can be toggled ON/OFF independently of each other to send the corresponding command tone combinations listed on page 2 of this datasheet. To initialize the DESTRUCT command the ARM command must first be initialized.

FLIGHT TERMINATION SYSTEM - 200W DUAL VEHICLE

DATA SHEET & TECHNICAL SPECIFICATIONS

Transmitter System

- ▶ Power Input: Universal Input: 115 VAC to 230 VAC, 50 to 60 Hz
- ▶ Carrier Frequency: User Adjustable between 406 – 450 MHz in 100 kHz steps
- ▶ Tone Frequencies: 1, 2, 3, 5, 6 and 7 per IRIG 313-01
- ▶ Carrier Frequency Stability: $\pm 0.0005\%$
- ▶ Power Output: 200 Watts (nominal)
- ▶ Output Impedance: 50 ohms
- ▶ Output Connection: Type N Female
- ▶ Modulation: Wideband FM, ± 30 kHz per tone
- ▶ Spurious Outputs: -50 dBc
- ▶ Vehicle 1 Commands: MONITOR – Apply Tone 5 (12.14 kHz)
ARM – Apply Tone 1 (7.50 kHz) to Tone 5
DESTRUCT – Remove Tone 5, Add Tone 2 (8.46 kHz) to Tone 1
- ▶ Vehicle 2 Commands: MONITOR – Apply Tone 6 (13.70 kHz)
ARM – Apply Tone 3 (9.54 kHz) to Tone 6
DESTRUCT – Remove Tone 6, Add Tone 7 (15.45 kHz) to Tone 3
- ▶ Protection: RF Output protection, Circuit Breaker/Fuse protected
- ▶ Enclosure: EIA 19" Shockmount case
- ▶ Dimensions: 28.5 x 22.5 x 21.6 inches
- ▶ Weight: Less than 120 lbs

Receiver System

- ▶ Power Input: Universal Input: 115 VAC to 230 VAC, 50 to 60 Hz
- ▶ Carrier Frequency: User Adjustable between 406 – 450 MHz in 100 kHz steps
- ▶ Tone Frequencies: 1, 2, 3, 5, 6 and 7 per IRIG 313-01
- ▶ Sensitivity: -106 to -115 dBm
- ▶ Maximum Input Power: +13 dBm
- ▶ Vehicle 1 Commands: MONITOR – Apply Tone 5 (12.14 kHz)
ARM – Apply Tone 1 (7.50 kHz) to Tone 5
DESTRUCT – Remove Tone 5, Add Tone 2 (8.46 kHz) to Tone 1
- ▶ Vehicle 2 Commands: MONITOR – Apply Tone 6 (13.70 kHz)
ARM – Apply Tone 3 (9.54 kHz) to Tone 6
DESTRUCT – Remove Tone 6, Add Tone 7 (15.45 kHz) to Tone 3
- ▶ Protection: RF Output protection
Circuit Breaker/Fuse protected
- ▶ Enclosure: EIA 19" Shockmount case
- ▶ Dimensions: 24 x 22.5 x 9.3 inches
- ▶ Weight: Less than 50 lbs
- ▶ Equipment Enclosure: Standard 19 inch transit case with Front and Rear covers and shock mounted internal frame

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