

TFTR-3945 FLIGHT TERMINATION RECEIVER and DECODER



DESCRIPTION

TFTR-3945 is a miniature airborne Flight Termination Receiver and Tone Decoder for Flight Termination System.

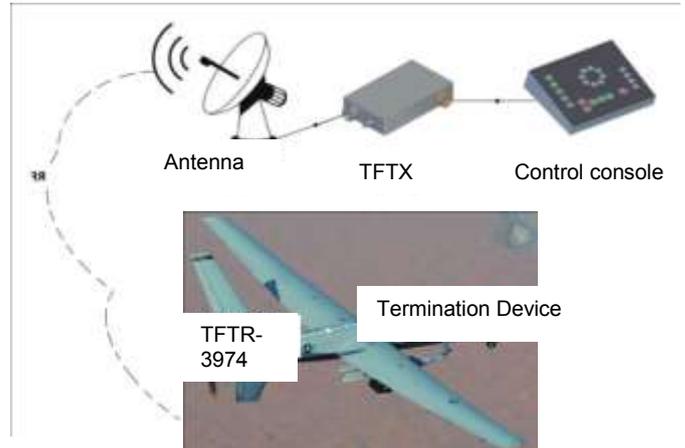
TFTR-3945 Miniature Flight Termination Receiver/ Decoder is designed to meet the demands of UAVs, missiles and target avionics Flight Termination tasks. Competitive size-weight (8.4 x 5.6 x 1.3 cm - 97g) makes it suitable for small size-low weight applications to various size-complexity applications.

TFTR-3945 is designed to function with tone based commands. The system possesses a highly sensitive super heterodyne RF receiver, a decoder which can decode 3 to 4 tones among 20 IRIG tones, and command outputs for flight termination devices.

The RF center frequency can be predetermined or can be programmed via the serial port (RS-422) also tone frequencies.

Switch voltage can be set according to load needs by changing the input load voltage. Out-put drive current and voltage support diverse load demands. Failsafe feature can be enabled or disabled during flight. Loss of tone duration or safe voltage interval levels can be programmed in operation.

Optional the TFTR is available with failsafe function and/or termination disable timer during system start. See detailed description under options.



MAIN FEATURES

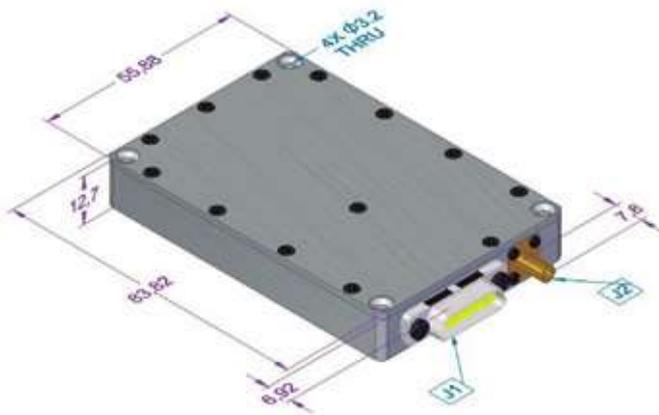
- Small Size & Weight.
- RCC-319 Compliant
- High RF sensitivity
- 2.0A continuous output per switch @28V (Arm-Out, Terminate-Out, Mon-Out, Opt-Out)
- Command Response < 20ms
- Low power consumption
- Failsafe Operation (Optional)

TECHNICAL SPECIFICATIONS

Frequency range	390 MHz-450 MHz
Input voltage	+ 12 to + 36 VDC
Command outputs	4 solid state outputs
Input/Output impedance	50 Ohm
Antenna connector	RF input SMA
Input current	150 mA max at 28 VDC
VSWR	Less than 2:1
Operating temperature	-45 to +85 °C
Dimensions	8.4 x 5.6 x 1.3 cm (3.3 x 2.2 x 0.5 inches)
Weight	97 g

* Contact us for specific spacing requirements

DIMENSIONS



- J1 MicroD25F (Power, Decoder, Tone Mon, Output)
- J2 SMA-F 50 Ω RF Input

ENVIRONMENTAL CONDITIONS

- Meets requirements of MIL-STD-461E
- Meets requirements of MIL-STD-810G

QUALITY ASSURANCE

- Each unit is produced and tested under Quality Assurance

OPTIONS

- Failsafe option according to IRIG RCC-319: Termination after a programmed time in case of loss of command link and/or loss of power
- Termination disable timer: A timer controlled function for blocking termination function for a programmed time (e.g. during set up or the start procedure of the related flying object).

CONNECTORS



J1 MicroD 25F

1. +28V In
2. RS-422 TX-
3. GND (28 Return)
4. GND (DC Return)
5. GND (DC Return)
6. Failsafe Enable (TTL-5V)
7. Failsafe System Input (TTL-5V)
8. TERMINATE Command (28V)
9. RS-422 TX+
10. OPTIONAL Command(28V)
11. NC
12. Tone C Monitor (TTL-5V)
13. CASE (GND)
14. +28V Load Vin
15. Failsafe Enable Status TLM (TTL-5V)
16. Tone B Monitor (TTL-5V)
17. Tone A Monitor (TTL-5V)
18. GND (DC Return)
19. Failsafe System Output (TTL-5V)
20. TERMINATE Command (28V)
21. Tone D Monitor (TTL-5V)
22. MONITOR Command (28V)
23. ARM Command (28V)
24. RS-422 RX-
25. RS-422 RX+

J2 SMAF 50 Ohm RF input