

Model ATE1001 – Portable Tri-Mode FTR Test Set (FTRTS)

DESCRIPTION

The Portable Tri-Mode FTR Test Set provides the ability to communicate with a Flight Termination Receiver (FTR) in order to obtain the FTR's status and configuration information, and the ability to generate an RF signal for testing FTRs. The FTRTS supports all three FTS protocols; IRIG, High Alphabet & EFTS. Parameters for all three modes can be varied for limit testing, with test sequences capable of being automated and/or controlled remotely. The user interaction to the FTRTS is via a Graphic User Interface on a 5.7-inch sunlight readable touch screen display. The portable version of the FTRTS includes a rechargeable battery, providing up to eight (8) hours of operation on a charge for flight line use.

FEATURES

The FTRTS is capable of the following:

- Generating Commands
 - IRIG Commands Pilot and tones
 - High Alphabet Commands and Pilot
 - EFTS messages
 - FSK Protocols
 - External baseband input for special modulation
 - Frame pulse output for timing measurement
- Reading and displaying FTR status
 - SSTO (Carrier) level
 - RSTO (EFTS state) or similar analog telemetry
 - Read Up to 6 discrete FTR command outputs
 - EFTS FTR serial status information
 - EFTS FTR serial User bits
- Configuring EFTS FTR via RS-232 port
- Perform RCC-313 tests 10, 13 – 23, 26, 29, 32 – 34, 35 – 40
- Perform test 24 using external RF Generator (tests 25 & 31 in near future)
- RF output from 10MHz to 1GHz for susceptibility testing
- RF level from -140dBm to +13dBm for sensitivity and other RF testing
- Carrier frequency settable in 1.0kHz steps
- Tone frequencies settable in 1Hz steps
- Timing settable in 0.1mSec increments
- All frequencies and timing derived from ± 0.5 ppm Maximum stability time base
- Includes rechargeable battery power – 8 hours operation on a single charge
- Powerful 650MHz ARM processor can automate test sequences
- 5.7" sunlight readable LCD with touch screen for control and status
- USB virtual Communications and Ethernet port for remote access and control
- TDU slot for EFTS encryption
- Built-in encryption using published EFTS test code, eliminating the need for a TDU in some cases
- Built-in High Alphabet test codes
- Compact, portable & lightweight for flight line use
- Customizable for special situations
 - RF and modulation uses digital SDR techniques
 - External Modulation input supports custom signals
 - LCD display with touch screen allows factory customization of capabilities and menus

