EFTS FTR Test Case (EFTC)

EFTS FTR INTERFACE

Interconnection with the Enhanced Flight Termination System (EFTS) Flight Termination Receiver (FTR)

STANDALONE SOLUTION

This portable test set provides power, configuration and status of all EFTS FTR signals: Discrete, Control and Status Interface (CSI), User Defined Port Interface.

THREE POWER SOURCES

EFTC and FTR are powered from one of three sources:

1) 4 AA Lithium Photo Batteries

2) Provided AC/DC wall plug

3) RED/BLACK Banana plugs (22-36V)

ONBOARD PROCESSOR

Embedded ARMSAM7 microcontroller provides communicates with FTR's CSI and user-defined port serial Interfaces.

Bright VFD

Integrated Vacuum Florescent Display (VFD). VFDs are more bright and work extremely well in locations where temperatures vary.

USER INTERFACE

Provided with VFD and rotating optical encoder pushbutton. User can access and change all important FTR configuration parameters as well as indicate real-time status from FTRs CSI and user-defined serial ports.
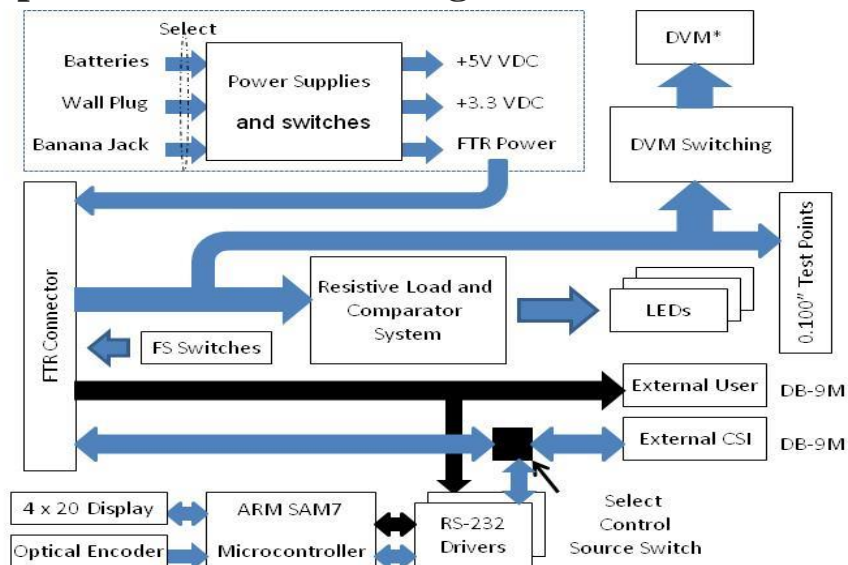
EFTS FTR Test Ports

External Test Points are provided to all FTR signals, CSI (via DB-9M) and user-defined port (via DB-9M).

specifications subject to change

- **Integrated FTR Power Supply**: Provide +28V power to FTR using battery, wall plug or external power supply.
- **FTR Configuration**: Total configuration and status solution: Use for configuring and verifying all common FTR features. Unit holds 10 Configurations in On-Board Flash Memory. Program 1 or all 32 locations.
- **FTR Signal Status:** Instantly view all FTR I/O Status with comparator-driven LED indicators
- **Integrated Digital Volt Meter (DVM):** Switches allow selection of any FTR signal to monitor.
- **Test Points:** .100" Header provides test point access to all FTR signals.
- **FTR Serial Status:** View FTR serial output parameters on display.
- **User Defined Status:** View last value output on EFTS FTR's user defined port.
- **Compact and Portable Design:** Small watertight, airtight, crush-resistant suitcase package.
- **Immediate-On**: Fast startup because there is no waiting for operating system to boot-up. (<1 sec)
- **Failsafe Testing**: hardware failsafe inputs can be set with switches
- **Message Error Testing:** Validate up to 100 Million messages for Error Rate Testing using FTR Command valid signal and onboard counter.

Simplified EFTC Block Diagram

Merritt Island, FL
Phone 321-684-2921

Bourne Technologies
Made In FL, USA

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Failsafe Testing-

Failsafe functions can be turn on with switches (FS Enable, FSO cross-connect from FTR Twin)

Physical Dimensions

Case External Dimensions:

10.8" L x 9.85" W x 4.87" H

(274.32mm x 250.19mm x 123.7mm)

Weight:<8 lbs

Operating Temperature:

-10°X to +50°C

Rugged Case Features:

Watertight

Airtight

Dustproof and

Crush resistant

PadLock

Power Specifications

Selection Switches

Batteries or Wallplug

Up-converter or Banana Jacks

Internal DC/DC Up-converter

Input Spec (4.5-9V Input, 2A)

Provides ~24DC FTR Power

Wallplug (drives up-converter)

115VAC wall plug, 5VDC, 2A

Batteries (drive up-converter)

4 Type AA Photo Lithium size
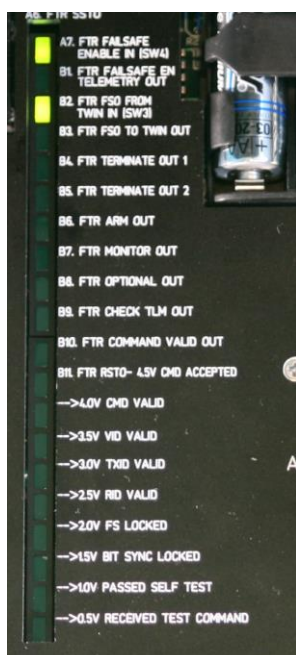
Available at local stores

Internal DC/DC Down-converter

Provides5V

Drives 3.3V Regulator

Input Spec (18-36V Input, 2A)

Banana Power Input

Switch Selectable to Power FTR

(FTR Input Spec= 22-36VDC)

specifications subject to change

Bright VFD Display

Real-Time LED Indications

Failsafe Status

Command Output Status

RSTO Ladder

DVM and Signal Switch Selection

Connection and Selection to External Serial I/O

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EFTC P/N Z00703

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