GEC-Marconi Electronic Systems

Flight Line Test Set

ESD3502

- *Provides parameter monitoring of in-situ data recording system*
- *Simplifies system calibration*
- *Fault identification down to a line replaceable unit*
- *High reliability*
- *Low power consumption*
- *Rugged, transportable case complete with durable test cable stowed in protective lid*

The Flight Line Test Set (FLTS) type ESD3502 has been designed to provide first line testing of a data recording system.

The FLTS can monitor all data parameter values, audio voice replay and fault status lines.

The FLTS is contained in an RAE standard equipment case type WTC 169748. Both case and lid are painted IRR matt NATO green.

Unit description ESD35O2 (FLTS):

The FLTS can select and monitor any one of six Harvard bi-phase data channels from the data recording system.

Synchronization words within each serial data stream allow the FLTS to decode and then display a selected data word.

The FLTS LED display indicates the binary state of all 12 bits of a word. Moreover, the decimal (or octal) value, of up to the 11 most significant bits, can be simultaneously indicated on a 4 digit, 7 segment display.

A parameter switch selects any word within a frame of data; a rate switch selects the rate of occurrence of that word within the frame. The FLTS can accommodate any rate selection provided the required data words are equi-spaced throughout the frame.

The FLTS can not only monitor data from the acquisition unit of a data recording system, but also replay data (after writing) from the recorder.

The FLTS also provides monitoring facilities (headphone jacksocket) for any audio voice replay from the recorder.

The FLTS is an extremely useful tool providing all the facilities for routine system maintenance checks, total system calibration and system fault finding.

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Input signal types

Serial data:

Differential line receivers providing up to six Harvard bi-phase input channels - signal levels as RS-422-A. Input word rate up to 512 words per second (each channel) 12 bits per word, LSB received first. Synchronization words to ARINC 573

Audio replay:

Audio voice

Output signal types

Headphones:

Buffered audio replay

Environmental

DEF-133 (Class L3 equipment)

Power requirements

Supply:

28V D.C. conforming to MIL-STD-704C, normal operating limits 20V to 31.5V d.c.

Consumption:

8W max.

Dimensions and weight

Height:	221 mm (8.7")
Width:	221 mm (8.7")
Depth:	280 mm (11")
Weight:	6kg max. (13.2 lbs)

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