Avionics

DT400 ARINC 429 DATABUS ANALYZER

AEROFLEX
A passion for performance.

Sets a standard for databus test equipment in the field or shop

The DT400 clearly establishes the standard for databus equipment. Never have so many powerful tools and features been assembled for supporting your digital avionics.

Data may be read from up to four buses and displayed in every format you might conceive including graphic plots. Using the DT400's many diagnostic functions adopted from the most sophisticated logic analyzer systems, it is now much easier to isolate troublesome intermittent data. A suspect LRU can be monitored for hours with a breakpoint condition programmed to capture and display fault information. BITE mode provides a very effective tool for interrogating maintenance data from ARINC 604 avionics. Equipment menus may be read, allowing the user to select and view present fault data, and recall flight data or generate a self test. You may even use the DT400 to record fault messages for later viewing or downloading. Here are some of the DT400's powerful features:

FEATURES

- Up to four receive and four transmit ports
- Displays ARINC 604 BITE messages
- 16-channel data recorder
- RS-232C and DAC ports for download and conversion
- Sophisticated analyzer features including breakpoint, history, etc.
- Eight display formats including engineering units and graphic plots
- Dynamic transmit patterns
- User defined labels and transmit tables

GENERAL SPECIFICATIONS

RECEIVER OPERATION

Ports

2 standard, expandable to 4 with additional board

Bus Frequency

12-14.5 kHz or 100 kHz (selectable)

Input Levels

±6.5 VDC to ±13.5 VDC (A to B)

Input Impedance

12.0 kΩ

Word Update

1 ms to 10 sec, update rate displayed as instantaneous, min or max value

Display Format

Pre-stored engineering units, full or data field hex and binary, user, ASCII, and graphic plots

Maximum Words

256 per SDI per channel

Bus Activity Monitor

Monitors loss of individual words; sensitivity selectable

Real-time Download/Conversion

RS-232C or 12-bit DAC port

TRANSMITTER OPERATION

Ports

Two standard, expandable to four with additional board

Bus Frequency

12.0, 12.5, 14.5, or 100 kHz (selectable)

Output Levels

±10.0 VDC (A to B)

Output Impedance

75 Ω

Word Update

1 ms to 10 sec (selectable)

Burst Mode

01 to 99 burst output at selectable rate

Display Format

Pre-stored engineering units, full or data field hex and binary, user, and ASCII

Maximum Words

128 per channel

Transmit Word Gap

2, 3, 4, 5, 6, 8, 12 bits (selectable)

Dynamic Transmit

Repeat pattern of ramps and flat segments. Levels programmable between ± full scale and segment times or 0 to 999.999 sec

Addt'l Transmit Options

Recorded data, pre-stored tables

BREAKPOINT OPERATION

Label Sequence

A, B, A or B, A then B, B then A

Data Conditions

EQ, NEQ, OR, GT, LT, /GT/, /LT/

Event Count

1 to 99 before break

History

Up to 24,576 words in a programmable window about the breakpoint; optional time stamp

Trigger Pulse

5V, 0.1 ms

RECORD OPERATION

Channels

Up to 16 labels from any combination of receive ports

Sample Interval

1 ms to 10 sec (selectable)

Record Capacity

120 Kbytes (e.g., 8.5 hours of single label at 1/sec)

Playback Options

Graphic plots, data lists, DAC download, RS 232C download

BITE OPERATION

BITE Formats

Compatible with distributed and centralized BITE concept used on 747-400, 737-300, MD-11, A320, A330, and A340 aircraft

Menu Display

Standard 14-line x 24-character format, with selectable menu choices

Maintenance Words

Displays 350/351 label maintenance bits. Bit status along with pre-stored text presented.

Recording Feature

Save up to 240 BITE screens for later viewing or downloading

Display

High contrast, twisted pneumatic LCD, 240 x 128 dot graphics or 16-line x 40-character format, Front panel brightness control

Power Requirements

18-36 VDC -15 Watts105-250 VAC, 47-400 Hz - 14 Watts or rechargeable internal lead-acid battery

PHYSICAL CHARACTERISTICS

Weight

18 lbs (8.16 kg)

Width

14.25" (36.2 cm)

Height

5.7" (14.47 cm)

Depth

12" (30.48 cm)

ORDERING INFORMATION

DT400-00-110	ARINC 429 Databus Analyzer (110V)
DT400-00-220	ARINC 429 Databus Analyzer (220V)
DT400-01-110	ARINC 429 Databus Analyzer w/ IEEE-488 (110V)
DT400-01-220	ARINC 429 Databus Analyzer w/ IEEE-488 (220V)
DT400-02-110	ARINC 429 Databus Analyzer w/ Williamsburg Protocol (110V)
DT400-02-220	ARINC 429 Databus Analyzer w/ Williamsburg Protocol (220V)
DT400-03-110	ARINC 429 Databus Analyzer w/ IEEE-488 & WPC (110V)
DT400-03-220	ARINC 429 Databus Analyzer w/ IEEE-488 & WPC (220V)

STANDARD ACCESSORIES

RS-Read Software/Cable, Operations Manual

OPTIONAL ACCESSORIES

ACPCMGR-400	Software support for DT400/400H
AC20629700	Extender board for DT400/600/650 `
ACRS232CBL	DT400/400H/600/650 RS-232 cable
AC20670200	DT400/600 2-TX port expansion
AC20670400	DT400/600 1-DAC port expansion
AC20670600	DT400/600 IEEE-488 interface board

EXTENDED WARRANTY

WDTRC/203C	Extended standard warranty 36 months with scheduled calibration
WDTRC/205C	Extended standard warranty 60 months with scheduled calibration

CHINA Beijing
Tel: [+86] (10) 6467 2761 2716
Fax: [+86] (10) 6467 2821

CHINA Shanghai
Tel: [+86] (21) 6282 8001
Fax: [+86] (21) 62828 8002

FINLAND
Tel: [+358] (9) 2709 5541
Fax: [+358] (9) 804 2441

FRANCE
Tel: [+33] 1 60 79 96 00
Fax: [+33] 1 60 77 69 22

GERMANY
Tel: [+49] 8131 2926-0
Fax: [+49] 8131 2926-130

HONG KONG
Tel: [+852] 2832 7988
Fax: [+852] 2834 5364

INDIA
Tel: [+91] 80 5115 4501
Fax: [+91] 80 5115 4502

KOREA
Tel: [+82] (2) 3424 2719
Fax: [+82] (2) 3424 8620

SCANDINAVIA
Tel: [+45] 9614 0045
Fax: [+45] 9614 0047

SPAIN
Tel: [+34] (91) 640 11 34
Fax: [+34] (91) 640 06 40

UK Burnham
Tel: [+44] (0) 1628 604455
Fax: [+44] (0) 1628 662017

UK Stevenage
Tel: [+44] (0) 1438 742200
Fax: [+44] (0) 1438 727601
Freephone: 0800 282388

USA Wichita
Tel: [+1] (316) 522 4981
Fax: [+1] (316) 522 1360
Toll Free: 800 835 2352

USA New Century
Tel: [+1] (913) 764 2452
Fax: [+1] (913) 782 5104

AEROFLEX
A passion for performance.

w w w . a e r o f l e x . c o m

i n f o - t e s t @ a e r o f l e x . c o m

Our passion for performance is defined by three
attributes represented by these three icons:
solution-minded, performance-driven and customer-focused.

Part No. 46891/250, Issue 2, 11/06