ADVANCED TECHNICAL GROUP

DT400

ARINC 429 DATABUS ANALYZER

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)

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 ohms
Word Update
1 ms to 10 sec (selectable)
Burst Mode
1-99 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 OPERATIONS

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 24,540 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 prestored 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 Watts 105-250 VAC, 47-400 Hz - 14 Watts or rechargeable internal lead-acid battery

PHYSICAL CHARACTERISITICS

Weight
18 lbs. (8.16 kg)
Width
14.25" (36.2 cm)
Height
5.7" (14.47 cm)
Depth
12" (30.48 cm)

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FAX: (305) 556-6510
ISO 9001:2008 Certified
www.a-tg.com

VERSIONS, OPTIONS, AND ACCESSORIES

When ordering please quote the full ordering number information.

Ordering Number	*Version*
987	DT400 ARINC 429 Databus Analyzer (110/220V)
988	DT400 ARINC 429 Databus Analyzer w/ IEEE-488 (110/220V)
989	DT400 ARINC 429 Databus Analyzer w/ Williamsburg Protocol Analyzer (110/220V)
990	DT400 ARINC 429 Databus Analyzer w/ IEEE-488 and Williamsburg Protocol Analyzer (110/220V)

Standard Accessories

60492	RS-Read software
58225	RS-232 cable
75637	DT400 Operations Manual (CD)
29972	Power cord, 3 cond., 1250 W, 10A, 125V
55642	Kit, fuse/fuse carrier (cap)

Optional Accessories

60493	Software support for DT400/400H
17897	Extender board for DT400/600/650
18056	DT400 2-TX port expansion
18059	DT400 2-RX port, 1-DAC port expansion
18061	DT400/600 IEEE-488 interface board

Extended Warranty

84381	Extended standard warranty 36 months with scheduled calibration
84382	Extended standard warranty 60 months with scheduled calibration

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