



FEATURES

- For bench top or field use
- Synchronous and Asynchronous operation
- Bit and Block testing
- Mirrored bits test
- DNP3 and Modbus Host or Drop operation
- Monitor DNP3 or Modbus addresses
- Polling test for up to 16 drops
- Continuous and timed tests
- Stop on error function
- Timing tests for RTS/CTS delay, round trip delay, and many more timing functions
- Compatible with Fireberd 6000 for 63, 511, 2047 synchronous tests

DESCRIPTION

The DCB BT-1 Bit Error Rate tester is designed with features found in no other BERT tester in its price range. These functions include handling both input and output flow control, hardware and software. Timing tests include RTS/CTS delay, character counting, round trip delay, bit gain and bit loss, counting control lead transitions, capturing the order of control lead transitions, high or low status of input leads, etc.

Polling tests can be sync or async. A BT-1 can be a polling host for up to 16 drops or one of the 16 droops. Polling tests

BT-1 Bit Error Rate Tester w/ DNP3, Modbus, Mbits

provide control over timeouts, retries and block size.

The BT-1 can be a **DNP3 host or drop**, or a **Modbus host or drop**. A monitor function monitors and reports DNP3 or Modbus addresses being polled.

Bert tests can be run continuously, for times ranging from 10 seconds to 15 minutes, or can be stopped on a receive error. In short, there is not another test set in its price range that provides the comprehensive range of tests for the price of the BT-1. All this and portability, too.

Setting up the BT-1 is easy with the 16 key keypad. Test parameters are set with the "set parm" key, tests are selected with the "set test" key. It is easy to navigate the LCD screen with right, left, up and down arrows. You can start, stop and pause tests.

The BT-1 is a great bench test or field testing tool. It has been invaluable for locating problems in polling systems, multiplexer systems, wireless systems, and more. Unlike a pc, the BT-1 is lightweight, portable. very flexible, verv and comprehensive in its test capabilities. For synchronous RS232 testing the BT1 "talks" to the obsolete Fireberd 6000. The 6000 is 18.5 pounds, the BT-1 1 pound. The 6000 is 975 cu. inches, the BT-1 only 56 cu. Inches. And best of all the BT-1 in not obsolete and is reasonably priced.

The test menus in the BT-1 come from decades of hands on experience tightly coupled between the day to day test bench personnel using the product and the BT-1 software design team. At DCB, when a new test is needed for a new product or unique problem, it is immediately incorporated into the test menu and is exercised on a daily basis. If there was ever a test found to be useful and one that the BT-1 is capable of exercising, it has been incorporated into the BT-1.

SPECIFICATIONS

General

RS-232/V.24 interface

Async to 38.4 Kbps, sync rate to 64 Kbps A 2' long DB-25 female to DB-25 male/female cable is included

Controls and Indicators

 $32\ {\rm character}\ {\rm LCD}\ {\rm display}\ (16\ {\rm characters}\ {\rm per}\ {\rm line}\ {\rm by}\ 2\ {\rm lines})$

16 key keypad

Test Controls

<u>Set Parameters</u>: speed, word length, parity, test duration, Xon/Xoff values, RTS holdoff before data block is sent and holdover after data block is sent

<u>Set Tests</u>: Async bert, sync bert, polling, timing tests, mirrored bits test, polling tests, function tests

<u>Bert test pattern duty cycle</u>: Once, continuous, 25%, 50%, 100%

 $\underline{\operatorname{Bert}}$ flow control: Xon/Xoff, CTS, inverted CTS, Busy flow and frequency

<u>Bert patterns</u>: QBF, QBF with block number, printable characters, all 256 hex values, 63, 511, 2047 patterns

<u>Polling parameters</u>: Host, drop, drop number, timeout, retry count, delay before responding to poll, number of sync characters, message length sent, DNP3, Modbus

<u>Timing tests</u>: RTS/CTS delay, round trip delay, character count, bit slip or gain, control lead on/off order, lead on/off transition count, modem or bit rate measurement, time from flow off or on until data stops or resumes, send short or long break, send alternate mark/space.

F<u>unction tests</u>: Toggle RTS x times per second for a defined time period, monitor and report DNP3 addresses, monitor and report Modbus addresses.

Physical/Electrical

Power requirements: 120 VAC, wall mount power supply 60 Hz, 18 Watts 4" x 1 ³4" x 7" One pound

Two year parts and labor warranty



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