



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



### **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

### **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 input and output flow control, both hardware and software flow control. Timing tests include RTS/CTS delay, character counting, round trip delay times, bit gain and bit loss testing, counting the number of control lead transitions, 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 set as a host with up to 16 drop BT-1's. The polling tests 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 test will monitor and report 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 an excellent bench test or field testing tool. Time and again it has been invaluable in locating problems in polling systems, multiplexer systems, wireless systems, and more. Unlike a pc, the BT-1 is lightweight, very portable, very flexible, and comprehensive in its test capabilities.

The test menus available in the BT-1 are the result of years 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.

# BT-1 Bit Error Rate Test Set

## 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 character LCD display (16 characters per line by 2 lines)  
16 key keypad

### Test Controls

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

Set Tests: Async bert, sync bert, polling, timing tests, mirrored bits test, polling tests, function tests

Bert test pattern duty cycle: Once, continuous, 25%, 50%, 100%

Bert flow control: Xon/Xoff, CTS, inverted CTS, Busy flow and frequency

Bert patterns: QBF, QBF with block number, printable characters, all 256 hex values, 63, 511, 2047 pattern

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

Timing tests: 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.

Function tests: 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 3/4" x 7"  
One pound

Two year parts and labor warranty



**Data Comm for Business, Inc.**

**2949 CR 1000 E**

**Dewey, IL 61840**

**Voice 8004DCBNET  
(800.432.2638)**

**Fax 217.897.1331**

**Email [info@dcbnet.com](mailto:info@dcbnet.com)**

**Web <http://www.dcbnet.com>**