

# HBT

## High Speed Bit Error Rate Tester



### FEATURES

- High Speed Bit Error Rate Tester for sync links
- Data rates from 32 kbps to 2.048 Mbps
- Several test patterns
- Internal or external clocking
- Interface modules:  
V.35, X.21, RS-530,  
V.24/RS-232,  
G.703 - 2.048 Mbps  
(unframed),  
G.703 - 1.544 Mbps  
(unframed),  
G.703- 64 kbps
- Simple straightforward operation

### DESCRIPTION

- HBT is a Bit Error Rate Tester for testing synchronous modems and other DCEs.
- HBT operates at data rates from 32 kbps to 2.048 Mbps, including 1.544 Mbps, and supporting all n x 56 kbps and n x 64 kbps data rates.
- When testing a DCE, a loop is performed, sending the data back to HBT. HBT compares the received pattern with the transmitted pattern and presents the result on an LCD display, counting bit errors, sync loss number, block errors and error-seconds. HBT also features an INJECT ERROR push button which enables the user to check the tester and the line by introducing errors in the transmitted data stream.

- Five test patterns are available: 511 pseudo-random, 2047 pseudo-random, 7 space 1 mark, 7 mark 1 space and alternating mark/space. Block size can be set to 512 bits, 1000 bits, 1024 bits, 2048 bits and 10 kbits.
- HBT can generate its own clock or receive clock from the connected DCE.
- HBT supports the following interfaces: V.35, X.21, RS-530, RS-232, G.703-2048 Mbps, G.703-1.544 Mbps and G.703-64 kbps by means of field-replaceable modules (*see Ordering*). Module replacement is straightforward and simple.
- Setup and operation are initiated from the front panel using soft keys and interactive menu selection on an LCD message display. Ten LED indicators display the activity of the interface signals.
- HBT is supplied in a convenient hand-held case. It is powered by a detachable external power supply unit.

## High Speed Bit Error Rate Tester

### SPECIFICATIONS

- **Clock Source**

Internal or external

- **Data Rates**

**X56:** 56K, 112K, 168K, 224K, 280K, 336K, 392K, 448K, 504K, 560K, 616K, 672K, 728K, 784K, 840K, 896K, 952K, 1.008M, 1.064M, 1.12M, 1.176M, 1.232M, 1.288M, 1.344M, 1.4M, 1.456M, 1.512M, 1.568M, 1.624M, 1.68M, 1.736M, 1.792M  
**X64:** 32K, 48K, 64K, 128K, 192K, 256K, 320K, 384K, 448K, 512K, 576K, 640K, 704K, 768K, 832K, 896K, 960K, 1.024M, 1.088M, 1.152M, 1.216M, 1.28M, 1.344M, 1.408M, 1.472M, 1.536M, 1.544M, 1.6M, 1.664M, 1.728M, 1.792M, 1.856M, 1.92M, 1.984M, 2.048M

E1 supported by 2.048 Mbps

T1 supported by 1.544 Mbps

- **RTS**

Controlled by user

- **Interface**

Choice of eight field-replaceable modules:

V.35, X.21, RS-530,

V.24/RS-232 (limited to 64 kbps),

G.703-E1 balanced unframed (2.048 Mbps only),

G.703-E1 unbalanced unframed (2.048 Mbps only),

G.703-T1 unframed (1.544 Mbps only) and

G.703-64 kbps

- **Power**

115V / 230V (±10%)

- **Physical**

**HBT:**

Length: 17.5 cm / 7.0 in

Width: 9.5 cm / 3.8 in

Height: 4.0 cm / 1.6 in

Weight: 405g / 14 oz

**HBT Power Supply Unit:**

Length: 12.5 cm / 4.7 in

Width: 6.5 cm / 2.5 in

Height: 4.0 cm / 1.5 in

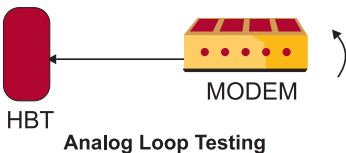
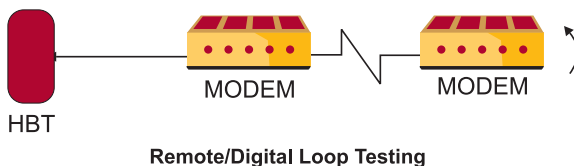
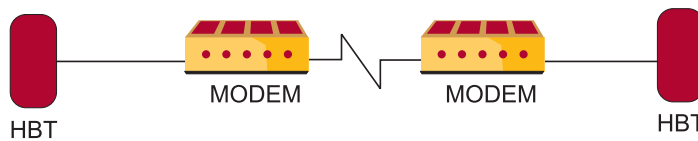
Weight: 340g / 12 oz

- **Environment**

Temperature: 0°–50°C/32°–122°F

Humidity: Up to 90%, non-condensing

### APPLICATION



### ORDERING

When ordering, please specify the interface required by the tester. Additional interface modules can be ordered separately.

**HBT\*/#**

High Speed Bit Error Rate Tester

**HBT-M/#**

Interface Module for HBT

\* Specify:

**115** for 115V operation

**230** for 230V operation

# Specify type of interface

**V24** for V.24/RS-232

**V35** for V.35

**530** for RS-530

**X21** for X.21

**G703-E1** for E1 balanced

**G703-E1/UB** for E1 unbalanced

**G703-T1** for T1

**G703-64** for 64 kbps



data communications

<http://www.rad.com>

- **Corporate Headquarters**

12 Hanechoshet Street  
 Tel Aviv 69710, Israel  
 Tel: (972) 3-6458181  
 Fax: (972) 3-6498250, 6474436  
 Email: [rad@radmail.rad.co.il](mailto:rad@radmail.rad.co.il)

- **U.S. Main Office**

900 Corporate Drive  
 Mahwah, NJ 07430  
 Tel: (201) 529-1100  
 Fax: (201) 529-5777  
 Email: [market@radusa.com](mailto:market@radusa.com)

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