

# WAN Tester I

- Tests asynchronous, synchronous, T-1, fractional T-1, E-1 and fractional E-1 facilities and equipment
- V.35, RS232, RS422/RS530, X.21,
  T-1 and E-1 interfaces
- Data rates from 50 bps to 16 Mbps
- Built-in speaker for monitoring DS0s or timeslots
- Displays G.821 performance measurements
- Terminate and Monitor
- Front Panel, VT100 console control or Command Line Interface
- · AC and battery power

The Telinc WAN Tester is a sophisticated bit error rate tester in a compact, hand held package. It can test a wide variety of communications facilities and equipment including T-1, fractional T-1, E-1, fractional E-1, modems, multiplexers, CSU/DSUs, T-1 ESF CSUs, DU, NTUs and TIUs. It is supplied complete with V.35, RS232, RS422/RS530, X.21, DS1 (T-1, 1.544 Mbps) and G.703 (E-1, 2.048 Mbps) interfaces.

The Tester is supplied with a wall-mounted AC transformer. It comes with eight nickel metal hydride batteries for complete portable operation. It also includes a built-in recharger.

#### T-1 and E-1 Testing

The user can choose from four operating modes: T-1, E-1, asynchronous and synchronous. In the T-1, E-1 modes, a variety of test patterns can be inserted in all or selected DS0s/Time slots, contiguous or non-contiguous, making the Tester ideal for fractional T-1 and E-1 testing.

In the T-1 and E-1 modes, the WAN Tester counts and displays bit errors, transmit and receive frequency, test seconds, bit error rate, and G.821 performance measurements (errored seconds, severely errored seconds, degraded minutes and available and unavailable times). In the T-1 mode it also displays receive level.

#### Async and Sync Testing

In addition to T-1 and E-1, the WAN Tester provides asynchronous and synchronous test modes. It generates test data in a choice of patterns and formats. The user can choose from a selection of twenty-eight asynchronous and seventy-five synchronous test speeds.

The Tester counts and displays bit errors, bit error rate, and total test seconds. In the asynchronous mode, it also counts and displays characters received, character errors and errored seconds. In the synchronous mode, it also displays transmit frequency, receive frequency, clear to send delay and G.821 performance measurements.

### Easy to use

The WAN Tester I can be controlled from the front panel or from a local or remote VT100 terminal. It includes a two-line LCD display and sixteen indicator lights that show selected mode, test and operating parameters. Parameters are selected by scrolling through values stored in the Tester. All operations can be performed using only ten keys.

# WAN Tester I

# **Specifications**

#### **ASYNC**

Speeds: 50 to 115,000 bps

Displays: Character Errors, Characters Received, Total Test Seconds, Errored Seconds, Round Trip Delay and Elapsed Time

LEDS: Pattern Lock, Pattern Recovered, TXD, RXD, RTS, CTS, DSR, CD, and DTR Patterns: 2^9 (511), 2^11 (2047), Binary, Fox Test, Mark, Space and Round Trip Delay

Loops: Self-Test

Interfaces: V.35, RS530, RS422 and RS232 Physical: DB 25 pin Female

#### **SYNC**

Speeds: 1,200 to 16,000,000 bps

Displays: Bit Errors, Bit Error Rate, Test Secs, Errored Secs, Severely Errored Secs, Degraded Mins, Available, Unavailable, RX Freq, TX Freq,

Bits Received, RTS Time, Round Trip Delay and Elapsed Time

LEDS: Pattern Lock, Pattern Recovered, Transmit Data, Receive Data, RTS (C), CTS, DSR, CD (I), DTR, TXC, RXC (S), and External TXC Patterns: 2^9 (511), 2^11 (2047), 2^15, ITU 2^15, QRSS, 2^20, ITU 2^20, 2^23, ITU 2^23, 1 of 8, 3 of 24, Alt, Mark, Space and Round Trip Delay

Loops: Self-Test and V.54

Interfaces: V.35/DB25, RS530/DB25, RS422/DB25, RS232/DB25, and X.21/DB15 pin

#### T-1

Speed: 1,544,000 bps

Displays: Bit Errors, Bit Errors Rate, Test Secs, Errored Secs, Severely Errored Secs, Degraded Mins, Available, Unavailable, RX Freq, TX Freq,

Signalling Bits, Density Errs, Frame Errs, CRC Err, BPV Err, RX Level Volts & dB, Slips, Round Trip Delay

LEDS: Pattern Lock, Pattern Recovered, Frame Lock, AIS (Blue), RLOS, CRC Err, BPV, D4, ESF, AMI, B8ZS and Yellow

Patterns: 2^9 (511), 2^11 (2047), 2^15, ITU 2^15, QRSS, 2^20, ITU 2^20, 2^23, ITU 2^23, 1 of 8, 3 of 24, T-1 DALY, T-1 DALY, UF, 55 Octet,

55 Octet UF, Alt, Mark, Space, Digimwatt, User 3 - 32, Round Trip Delay, DDS OCU Loop, DDS CSU Loop and DDS DSU Loop

Self-Test, ATT Loop U/D, ANSI Loop U/D, ATT Payload, ANSI Payload, Smart Jack 1 & 2 (Framed & Unframed) and V.54

Speaker: Monitors selected TX or RX DS0 for voice

Interfaces: DS1 BiPolar, 110 Ohm, AMI/B8ZS Coding Physical: RJ48C and Dual Bantam

## E-1

Loops:

Speed: 2,048,000 bps

Displays: Bit Errors, Bit Error Rate, Test Secs, Errored Secs, Severely Errored Secs, Degraded Mins, Available, Unavailable, RX Freq, TX Freq,

Slips, CRC Errs, BPV Errs and Frame Errs

LEDS: Pattern Lock, Pattern Recovered, Frame Lock, AIS (Blue), RLOS, CRC Err, BPV, DMFA and RRA

Patterns: 2^9 (511), 2^11 (2047), 2^15, ITU 2^15, QRSS, 2^20, ITU 2^20, 2^23, ITU 2^23, 1 of 8, 3 of 24, Alt, Mark, Space, Digimwatt and User 3 - 32

Loops: Self-Test and V.54

Speaker: Monitors selected TX or RX timeslot for voice

Interfaces: G.703/704, 75 & 120 Ohm, HDB3 Coding Physical: Dual Bantam, Dual BNC and RJ48C

#### **Physical**

Mechanical: The WAN Tester I measures 5" (12.7 cm) H x 7" (17.8 cm) W x 2" (5.1 cm) D and weighs 1 lb (.45 kg)

#### Part Numbers for ordering

TL2084B WAN Tester I without BNC connectors TL2084EB WAN Tester I with BNC connectors

