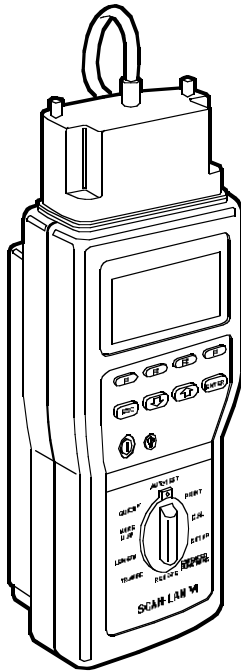


BLACK BOX[®]

NETWORK SERVICES

SCAN-LAN VI



Get unequalled power and measurement precision with this easy-to-use tester.

Key Features

- ▶ **Supports a variety of cable standards to 250 MHz, including CAT 5E and Category 6.**
- ▶ **Optional performance modules plug into the tester so you can tailor the SCAN-LAN to your testing needs.**
- ▶ **Tamper-proof Report Manager format.**

SCAN-LAN VI is the network cable-testing tool that meets your testing needs now and will evolve to meet your future needs. The SCAN-LAN system consists of two handheld units (one functions as a main unit, the other as a remote unit) and your choice of optional plug-in modules.

SCAN-LAN tests a variety of cable types, including Category 6 Frequency and Category 5E.

The SCAN-LAN supports these cable standards to 250 MHz:

- TSB-67 Basic Link, CAT 5
- TSB-67 Channel, CAT 5
- ISO 11801 Class D
- ScTP Class D
- AS/NZS 3080 Class D

- BICC Millennium
- FTP 120 ohms
- JIS X 5150

Network standards supported at 250 MHz include:

- IEEE 100BASE-TX
- ANSI X3T9.5 TP-PMD
- ATM 155 MBPS

And in addition to complying fully with TIA TSB 67 requirements for certifying CAT 5/Class D links, the SCAN-LAN performs several important new measurements to 250 MHz, including:

- Power Sum Near-End Crosstalk (PS-NEXT)
- Power Sum Attenuation-to-Crosstalk Ratio (PS-ACR)

A two-way system (two SCAN-LAN VI units—you get both when you order) is required for 250 MHz tests and all Remote NEXT tests.

To test multimode fiber in pairs, the Talk and Test Module compares bi-directional dual-wavelength 850/1300-nm loss, length, and propagation-delay measurements against several industry standards.

With SCAN-LAN's included microphones, you can talk to your testing partner over the same cable that you're testing.

Plus, the SCAN-LAN can store up to 450 test reports (900 total per pair of scanners).



Specifications

General

Display: Backlit graphic LCD, 128 x 64 pixels

Operating Controls: 10-position rotary function selector; elastomeric keypad

Audible Alarm: Operator Enabled/Disabled

Operating Temperature: 0 to 50°C

Storage Temperature: -20 to +60°C

Relative Humidity: 10 to 90%, noncondensing

MTBF: >50,000 hours

Size: 24.4 x 9.9 x 6.4 cm

Weight: 0.88 kg

Power

Battery: (8) AA alkaline batteries per unit or (1) NiMH rechargeable battery pack per unit

Battery Life: 8 to 10 hours continuous use or >800 Autotests (typical)

Low Battery Indicator: Audible alarm plus LCD display

Automatic Power-Down: 2 to 30 minutes (selectable) or disabled

AC/Mains Adapter: 12 to 15 VDC, 300 mA

Input: 120V or 230V ±15%

Output: 60 or 50 Hz

Frequency: 12 or 14 VDC

Lithium Coin Cell (Autotest Results Storage) Life: 2 years

Performance Modules

Performance Module inputs withstand telco ring voltages; 175V peak, 20–60 Hz superimposed on 56 VDC, maximum. They also withstand electrostatic discharges per IEC 801-2 severity level 4 (8KV contact).

Standard: Modular Plug (TS691 or TS691E)

Optional: Modular Jack (TS692)

Optional: Coax (TS693)

Memory

Test Storage: Storage of up to 450 Autotest results plus one Traffic Report in each SCAN-LAN VI

Imprint: Date on all tests

Non-Volatile Memory: Lithium battery-backed memory for setup, test results, and NVP values

Wire Mapping (Twisted-Pair Wiring Only)

Displays the Following Errors: Miswired pairs, shorts, opens, shorted pairs, crossed pairs, and split pairs. Includes test of shield (if present).

Traffic (Ethernet Only)

Parameters Monitored: % Utilization, % Collisions, Peak Traffic

Other Features: Continuous bar graph to display activity

Attenuation-to-Crosstalk Ratio

ACR is calculated for each pair over the full frequency range per test specification selected.

Serial Port

Connector: DB9 male (pins)

PC Cable: Null modem, DB9 female (socket) to DB9 female (socket) and DB25 female serial port pin assignments

Baud Rate: 1200 to 38,400 bps (selectable)

Format: 8-bit, no parity, 1 stop bit, (8N1)

Flow Control: XON/XOFF, Hardware (CTS/DTR), None

Cable Length

Range: 0 to 610 m twisted pair

Accuracy:
0 to 304.8 m: ±0.6 m ±2% ±NVP Uncertainty
305.1 to 610 m: ±0.6 m ±3% ±NVP Uncertainty

NVP (Nominal Velocity of Propagation): 0.5 to 0.99%

Cable Fault Types: Shorts, opens, intermediate impedance anomalies

Number Of Faults: End of cable and two intermediate anomalies

Fault Threshold: User-defined, 4 to 10% (7% default)

Talk and Test Module for the SCAN-LAN IV

Supported Standards and Network Applications:

TIA 568A, ISO 11801/EN 50173, IEEE 802.3 (10BASEFB, 10BASEFL, 10BASEFP, 10BASEFX, 100BASEFX), IEEE 802.5 (Token Ring), IEEE P802.37/D4 (100BASESX [Gigabit Ethernet], 1000BASELX [Gigabit Ethernet]), IEEE 802.12 (100VG AnyLAN), ISO/IEC 9314-3 (FDDI), ATM 100, ATM 155, ATM 155 SWL, ATM 622, ATM 622 SWL

Length: 2000 m

Resolution: 1 ft. (1 m)

Length Accuracy: 0 to 305 m)±2 ft. (0.6 m) ±2% IR Uncertainty; 305 m to 2000 m ±0.6 m ±3% IR Uncertainty

Propagation Delay: 10 to 10,000 ns

Optical Loss: Dynamic Range: +3 dBm to -55 dBm; Resolution: 0.01 dB; Accuracy: ±0.3 dB @ -20 dBm

Operating Temperature: 0 to 50°C

Storage Temperature: -20 to +60°C

Humidity Tolerance: 10 to 90%, noncondensing

Power: Derives power from the SCAN-LAN VI

Weight: 144.59 g

Ordering Information

ITEM	CODE
SCAN-LAN VI	
230-VAC	TS6000AE
Talk and Test Module	TS6001A
Optional Performance Modules	
Modular Plug	TS691E
Modular Jack	TS692
Coax Module	TS693
FIBEROptic Kit (Performance Module and Light Source)	TS698A
FIBEROptic Kit Performance Module	TS696A
FIBEROptic Light Source	TS697A
Battery Pack (Ni/MH)	TS694

