Net-Advisor-RS and Veri-Nets

Get speedy test results with these compact, battery-powered network testers.

FEATURES

» Choose from UTP/STP/coax testers or Ethernet/ Fast Ethernet/Gigabit testers.

» Or, identify an RJ-45 jack (10BASE-T Ethernet], 100BASE-TX [Fast Ethernet], 1000BASE-T [Gigabit Ethernet], Token Ring, analog telephone, or PBX).

TS024A

TS022A   *TS027A-R3*

TS026

Net-Advisor-RS (TS024A)

- Nonintrusive monitoring. Inductive sensor reads data signals through UTP, STP, and coax cable.
- Tests active links—no need to isolate a link from the LAN.
- Display LAN activity on Ethernet and EtherTalk® networks.
- Simply insert cable into the open clamp—it closes and aligns automatically.
- Has an RS-232 interface and includes cable and software for downloading of measurements to a host computer.
- Log network loading and traffic for 24-hour intervals.
- Includes an RS-232 interface, a software for downloading data, and a handy carrying pouch.
- Verify connectivity, measure network segment loading, and log traffic levels.
- Includes an RS-232 interface.

   No more disassembling your network and adding adapters and connectors to access data signals! The Net-Advisor eliminates these hassles by reading the signals through the cable and providing the necessary fault-isolation information without a direct electrical connection. This pocket size tester is battery operated with an AC adapter for extended operation. Tracking is quick and easy!

   Just press enter and insert your UTP, STP, or coax cable into the open clamp. It closes and aligns the cable automatically. The Net-Advisor instantly displays Ethernet activity on the cable. High-frequency magnetics quickly locate dead drops, verify good punchdowns, and isolate choke points in one or more segments. Users can also evaluate network loading of new applications. The Net-Advisor even spots "no packet" conditions that more expensive software can't.

   Operating in Traffic Mode provides real-time network statistics, including instantaneous, average, and peak utilization. Log Mode records and graphically presents network loading over time. It features unattended traffic level logging from 12 minutes to 24 hours. Audio signals indicate when the traffic threshold is exceeded.

   Plus, it includes an RS-232 interface and DataManager software for data downloading to a personal computer or other user terminal.

Veri-Net and Veri-Net+

- Tests active links; no need to isolate a link from the LAN.
- Veri-Net models decode link signals and display the exact configuration of the connected equipment within seconds.
- Veri-Net+ features "Link Activation."
- Veri-Net+ auto-matically powers down after 12 minutes of inactivity.
- Fault light on the Veri-Net+ flashes when the battery is low.

Veri-Net (TS022A)

   The Veri-Net (TS022A) is an essential tool for testing Fast Ethernet (100BASE-TX) and standard Ethernet (10BASE-T) links. This tester decodes link signals and displays the exact configuration of the equipment connected—all at the press of a button. Test results appear in only three seconds!

   The Veri-Net also verifies link connectivity to the far end, tests for reported faults, and determines the polarity of the outlet or cable.

   While the Veri-Net is a receive-only tester, the Veri-Net+ adds a transmit function called "Link Activation." It transmits a link pulse simulating a link partner which can be viewed on the far-end equipment (such as a hub, switch, or NIC) as a distinctive "blink-blink" of the Link LED. This lets you verify two-way Link integrity and identify connections from the wall outlet to the hub or switch. It performs all these functions and is a receive-only tester.

   The Veri-Net Accessory Pack (TS026) includes (1) nylon mesh carrying pouch, (1) 16" RJ-45 patch cable, and (1) RJ-45 coupler.

Veri-Net+ (TS027A-R3)

   Get all the features of the Veri-Net, plus a bidirectional Link Activation function, a tone generator that enables you to trace the cable path with a standard tone probe when a "No Link" condition is found, and a 6-inch pigtail for easier connections.

   Also, the Veri-Net+ automatically powers down after 12 minutes of inactivity, and its fault light flashes when the battery is low.

Network Tone Probe (TS155-R3)

- Find cables easily.
- Emits its locator tone when it touches the tip of the wire or even just the jacke
- Connects to punchdown blocks, patch panels, or wallplates.
- Traces cable up to 2000 ft. (609.6 m).

Suppose you need to move a PC or workstation from one location in your company to another. If this PC is connected to a file server, it will probably have a direct cable connection. But what if you don't know which cable on the server is the one that's linked to your PC?

Black Box has a tool combination that emits an audio tone that can be sensed by a sound probe over a particular cable.

In fact, the Network Probe works with the Network Tone Generator (TS151, ordered separately) to trace a tone through a length of cable up to 2000 ft. (609.6 m) long.

Simply connect the Network Tone Generator's clip lead to the cable on the PC end. Then go to the wiring closet or bundle that contains the file server's cabling and wave the Network Probe over the bundle of cables. When it locates the correct cable, the probe will emit its distinct audio tone.

This dynamic duo enables you to verify cable continuity, document cable length, cable starting and ending points, and identify cable types.

For more information about the Network Tone Generator (TS151), see page 3.

Network Tone Generator (TS151)

- Sends a continuous audio tone along any 4- or 6-wire RJ-11 or 8-wire RJ-45 cable to determine cable continuity.
- with the pen-size Network Tone Probe, an inductive receiver, which emits its locator tone when it touches the tip of the wire or even just the jacket.

The Network Tone Generator provides a continuous tone that identifies the continuity of a particular length of cable. When used with the Network Probe (TS155-R3), the Network Tone Generator provides a tracing tone. Use them together to find cables in a wiring bundle or wiring closet.

Diagnostic LEDs on the generator indicate cable continuity and polarity. The Network Tone Generator has two clip leads that attach to the cable to create the tone that's sensed by the Network Probe at the cable's wiring closet or bundle end.

For example, when you locate the hypothetical PC cable discussed on page 2 (in the Network Probe section), the continuity LED on the generator will light. If the cable's polarity is reversed, the polarity LED will light.

TS155-R3

TS151

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Veri-Net Pro (TS028A)

- Identifies the outlet before connecting and possibly damaging expensive equipment.
- Also identifies the type of equipment attached at the far end and to warn of the presence of potentially harmful signals.
- A must-have when updating cable-plant documentation.
- Flexible pigtailed protects the tester from breakage and excessive cable bends. and other furniture.

Connecting equipment to an untested wall outlet can be risky business. Why chance damaging your equipment by plugging it into an incompatible electrical interface? The Veri-Net Pro is the essential tool you need for managing, installing, and maintaining network or telecom systems in an easy and safe manner.

The Veri-Net Pro quickly identifies the type of network or telephone connection on an outlet's RJ-45 jack. It tells you if it's a 10BASE-T (Ethernet), 100BASE-TX (Fast Ethernet), Token Ring, analog telephone, PBX, or ISDN connection. The tester warns you if unidentified signals occupy the jack or if the jack isn't connected.

For example, the Veri-Net Pro can help you avoid PBX systems that supply voltage and current levels that far exceed what your modems or network devices can handle. When conducting cable and network tests, use the tester to verify that there are no damaging voltages present before hooking up expensive cable testers or protocol analyzers.

And knowing an outlet's connection can save you time when troubleshooting physical-layer problems, such as whether a workstation is correctly connected to a LAN. You can also eliminate the guesswork when determining the outlet you need or tracing cables.

Other typical applications include using the Veri-Net Pro to organize a messy wiring closet, verifying that cable runs connected at the far end are still connected at the panel. Or use the tester when punching down a new connection to verify that your outlet is functional.

Here's how the tester works. The Veri-Net Pro scans all eight wires connected to an RJ-45 outlet. It identifies the type of system connected or the presence of potentially harmful signals.

The tester's flexible 6-inch (15.2-cm) pigtailed connector cable helps you access hard-to-reach wallplates behind desks and furniture. If the outlet is sideways or upside down, just plug in the tester and flip it over to identify line and network connection status.

Eight LEDs indicate whether you're attached to a device (10BASE-T, 100BASE-TX, or Token Ring) or a line (analog, ISDN, or PBX). Both 10BASE-T and 100BASE-TX LEDs will light up if the attached device is configured for 10/100 autonegotiation.

NOTE: On a 10BASE-T/100BASE-TX network with autonegotiation, the Veri-Net Pro's 10-T and 100-T indicators will both light.

Veri-Net VoIP (TS200A)

- Troubleshoots VoIP and PoE ports and Gigabit Ethernet connections.
- Verifies connectivity for 10BASE-T, 100BASE-TX, or 1000BASE-T links for 802.3 equipment.
- Measures port voltage to ensure that ports supply the proper voltage level to devices.
- Auto powerdown preserves battery life.
- Detects and decodes link signals on Ethernet networks and identifies signaling type.
- Identifies port speed, duplex mode, and autonegotiation capabilities for ports tested.

Test Gigabit Ethernet links and Power over Ethernet (PoE) ports that supply power to Voice over IP (VoIP) phone systems with the Veri-Net VoIP. Not only does it test copper Gigabit cables, but it also measures and verifies adequate voltage over a VoIP/PoE link.

The Veri-Net VoIP checks the port's speed and duplex mode, along with its autonegotiation capabilities.

The tester detects and de-codes link signals on Ethernet networks and identifies the signaling type as LAN, NIC, or crossover. (The crossover type indicates that the attached device is a hub or switch.) The tester even identifies which port on a hub or switch is connected to a specific wall outlet. It does this by flashing the Link light on the connected port.

Here's how it works: When you insert the tester's plug end into the RJ-45 port of a hub, switch, network interface card (NIC), or wall outlet and press the TEST button, the tester then scans the wire pairs for voltage. If you want to attach the tester to a UTP or STP cable, use the included RJ-45 coupler. Once the tester confirms that correct power is available, it determines the VoIP or PoE port's speed and duplex mode.

Choose the Veri-Net VoIP to provide the critical network connectivity and configuration information you need to maintain and troubleshoot a LAN.

TS028A

Veri-Net Pro Accessory Kit (TS049

TS200A

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TECH SPECS

TXD Jitter — 2 ns maximum

Networks Supported — TS022A, TS027A-R3: 100BASE-TX (IEEE 802.3u) and 10BASE-T (not for use with 100BASE-T4 equipment);
TS024A: Ethernet 10BASE-T and 4-/16-Mbps Token Ring;
TS028A: 100BASE-TX (IEEE 802.3u), 10BASE-T, Token Ring, analog, PBX, ISDN;
TS200A: 10BASE-T, 100BASE-TX, 1000BASE-T

Cable Types — TS022A, TS027A-R3, TS028A, TS200A: UTP, STP;
TS024A: UTP, STP, coax, with a maximum diameter of 0.34" (0.86 cm)

Connectors — TS022A, TS027A-R3, TS028A: (1) RJ-45;
TS024A: Cable-portal "jaws", (1) RS-232 serial port;
TS200A: (1) RJ-45 plug on an integral cable
TS151: (1) RJ-45, (2) clip leads

Indicators — TS024A: Graphical LCD display (110 x 32), (10) unlabeled LEDs, audible status monitor;
TS022A, TS027A-R3: (8) LEDs: LAN, NIC, 10T, 100TX, 10FD, 100FD, No Link, Fault;
TS200A: (8) LEDs: LAN, NIC, 10T, 100TX, VoIP PoE, 10FD, 100FD, 1000FD;
TS028A: (8) LEDs: 10T,100T, Tel, PBX, ISDN, TR, No Link, Signal;
TS151, TS155-R3: (3) LEDs for continuity and polarity

Temperature Tolerance — Operating: 32 to 122°F (0 to 50°C);
Storage: 14 to 131°F (-10 to +55°C)

Humidity Tolerance — 5 to 95%

Power —
TS022A, TS027A-R3, TS028A, TS200A, TS151: (1) 9-volt alkaline battery;
TS024A: (2) AA batteries (AC adapter included for extended operation);
TS155-R3: (1) 12-volt alkaline battery

Size — TS022A, TS027A-R3, TS028A, TS200A: 6.8"H x 1.4"W x 1.3"D (17.3 x 3.6 x 3.3 cm);
TS024A: 6.9"H x 2.9"W x 1.1"D (17.5 x 7.4 x 2.8 cm);
TS151: 3.8"H x 2.3"W x 1"D (9.7 x 5.8 x 2.5 cm);
TS155-R3: 7"H x 1.3"W x 0.8"D (17.8 x 3.3 x 2 cm)

Weight — TS022A, TS027A-R3, TS028A, TS155-R3: 0.3 lb. (0.1 kg);
TS024A, TS059A, TS200A: 0.5 lb. (0.2 kg);
TS151: 1 lb. (0.5 kg)

TS027A-R3

TS155-R3

What's included

TS024A:
- ✦ (1) Net-Advisor-RS
- ✦ (1) Pouch
- ✦ (1) AC adapter
- ✦ (2) AA batteries
- ✦ (1) RS-232 interface cable
- ✦ DataManager software (2 diskettes)
- ✦ (1) Users' manual

TS022A, TS027A-R3, and TS028A:
- ✦ (1) Veri-Net, Veri-Net+, or Veri-Net Pro
- ✦ (1) Female-to-female RJ-45 coupler
- ✦ (1) 9-volt battery
- ✦ (1) Users' manual

TS026:
- ✦ (1) 16" (40.6-cm) RJ-45 patch cable
- ✦ (1) RJ-45 coupler
- ✦ (1) Nylon mesh carry pouch

TS155-R3:
- ✦ (1) Network Probe
- ✦ (1) 12-volt battery
- ✦ (1) Users' manual

TS151:
- ✦ (1) Network Tone Generator
- ✦ (1) 9-volt battery
- ✦ (2) Clip leads
- ✦ (1) Users' manual

TS049:
- ✦ (1) 1-ft. (0.3-m) RJ-11 patch cable
- ✦ (1) RJ-45 crossover coupler
- ✦ (1) Nylon mesh carry pouch with belt loop

TS200A:
- ✦ (1) Veri-Net VoIP tester
- ✦ (1) 9-volt alkaline battery
- ✦ (1) RJ-45 coupler
- ✦ (1) Users' manual

Item	Code
To test active links on UTP, STP, or coax cables, order…	
Net-Advisor-RS	**TS024A**
To test 10BASE-T and 100BASE-TX links, choose…	
Veri-Net	**TS022A**
Veri-Net Accessory Pack	**TS026**
✦ Includes (1) 16" RJ-45 patch cable, (1) nylon mesh carrying pouch, and (1) RJ-45 coupler.)	
Test and trace cable with…	
Veri-Net+	**TS027A-R3**
For tracing cable, you might also need…	
Network Tone Probe	**TS155-R3**

Item	Code
To generate a tone for the Network Probe, order…	
Network Tone Generator	**TS151**
To identify the type of outlet connection on an RJ-45 jack, choose…	
Veri-Net Pro	**TS028A**
Veri-Net Pro Accessory Pack	**TS049**
✦ Includes [1] nylon mesh carrying pouch, (1) 12" RJ-11 patch cable, and (1) RJ-45 coupler.)	
To test Gigabit Ethernet, VoIP, and PoE ports, order…	
Veri-Net VoIP	**TS200A**