

## Overview

The Validator NT955 offers active network testing, digital performance and speed certification for CAT5, CAT5e, and CAT6 Ethernet cables. The Validator provides signal quality testing for coax, telephone, audio and security cables in the installation and maintenance of local premise networks.

### Key Features

- Software creates a complete topology of the network with cables, equipment, and connections that you can save, print and update as changes are made to the network
- Import existing Visio/AutoCAD images for your network layout
- Dedicated I/O ports for network, telephone, coax and paired cables
- Download to computer via USB port and save/print cable test results and layouts

### Applications

- Speed test individual Ethernet cable runs up to 1 Gigabit
- Test for TIA568 interconnect problems
- Qualify lines for VoIP usage
- Determine fault locations, cable length and delay or noise conditions
- Identify hubs, NIC, or Auto MDI/MDI-X devices
- Identify port services: POTS, Ethernet, ISDN, token ring
- Configuration links between nodes at Gigabit speeds



### Kit Includes:

Validator-NT Main Unit and Smart Remote • 2 lithium-ion rechargeable long-life batteries • 2 AC adapter/charger units • 4 adapter cable assemblies • Set of 8 wiremap remotes • USB cable assembly • Compact flash card • Plan-Um™ design layout software • Deluxe carrying case with cushioned sides  
**Order Number: NT955**  
**VIAS Number: NT955**



Dedicated I/O Ports



Plan-Um™ Software



Validator NT955 Kit

# Technical Information

## Signal Quality Testing on Network Cable

- Wiremap up to 8 locations at a time with remote kit (included)
- Length of cable (TDR) distance to opens and shorts
- SKEW
- Channel response
- Echo testing (return loss)-impedance mismatches
- Signal-to-Noise Ratio including attenuation, amplitude, NEXT [all combinations on all pairs (12)]

## Performance and Speed Certification

- Supports IEEE802.3 speed criteria up to 1 Gb with full Bit Error Rate Test
- Test interconnect specifications per TIA568/570
- Measures the quality of the signal through the cable against set criteria on cable data-carrying capability in real time. 100 Mb/Gb speeds
- Real-time testing of the performance capability of the cable qualifies VoIP lines
- Measures signal quality in actual link environments that could account for cable inadequacies: physical installation, kink, loops, physical terminations, dry shorts, and miswires

## Active Network Capabilities

- Detects voltages on the port and classifies it as phone, legacy phantom power over Ethernet or unknown
- Ethernet equipment and displays advertised speeds, actual linked speed, hub/switch-NIC-auto, signal-to-noise ratio (100 Mb and 1 Gb), timing skew (1 Gb) and crystal frequency error between NT and other device
- Cable not terminated at other end, reporting length of each pair and any shorts, split-pairs or opens in the cable
- Cable test results on Validator-NT remote end
- Manual or DHCP modes supported
- Pings up to four manually-entered ping target addressed in dotted-quad or URL formats, DNS server, routers/gateway and default internet address
- Reports number of packets sent/received and last response time
- Flashes hub/switch's link indicator to locate link with Validator-NT connected to it

## Operating Specifications

*Display* 256 color back-lit LCD

*Power Source* AC adapter/lithium-ion rechargeable batteries

*Interfaces* USB port for uploading/downloading files to/from a laptop/PC

*Operating System* Linux

*Keypad* Full navigation set with easy alphanumeric data entry and soft key functions

## Physical Characteristics

### Physical Dimensions

#### Main Unit

*Size* 22.9 x 11.4 x 5.3 cm  
(9 x 4.5 x 1.8 inches);

*Weight* 710 grams (1 lb 9 oz)  
with battery

#### Remote

*Size* 14.2 x 11.2 x 4.4 cm  
(5.6 x 4.4 x 1.8 inches);

*Weight* 341 grams (12 oz)  
with battery

### Environmental

*Operating temperatures*  
0 to 50°C (32 to 122°F)

*Storage temperature*  
-20 to 70°C (-4 to 158°F)

#### Humidity

10% to 85%, non-condensing

### Interfaces

- USB cable assembly
- Compact flash card (included)

### Test Connectors

- 8-position shielded modular jack (data)
- 6-position modular jack (telephone)
- F-coax (video) and dual banana jack (security, speaker, etc)

### Cable Types

- Shielded or unshielded CAT3, 5, 5E, 6
- Telephone, coax, speaker wire, security, fire, and alarm

### Battery Type

Rechargeable, removable lithium-ion packs

### Maximum cable length for testing for split pairs

Up to 1500 feet, depending upon cable type