

# SmartClass Validator™ NT950



## Overview

Designed specifically for Ethernet systems, the SmartClass Validator™ NT950 measures and presents digital speed and performance results on CAT5, CAT5e, and CAT6 cables to ensure the cabling will do the job it's rated to do. Included software stores and organizes data into reports for billing, and archives network system information for later use in modifying or upgrading previously-installed systems.

## Key Features

- Shows Pass/Fail, cable length and speed rating
- Create custom floor plans or import existing AutoCAD/Visio files
- Show specific ports for network, telephone and cable
- Print end-of-job report for billing purposes
- Print/email and save layouts for approval

## Applications

- Test/certify Ethernet system network cables up to 1 Gigabit speed, using a full digital Bit Error Rate Test
- Measure cable length and distances to opens and shorts using advanced TDR technology
- TIA568 measurements include NEXT, attenuation, return loss, SKEW and overall Signal-to-Noise Ratio
- Test telephone, coax, security/alarm cables for continuity, proper termination and polarity
- Wiremap individual runs to locate and identify cable routes



## Kit Includes

Validator™ main unit and smart remote • 2 lithium ion rechargeable long-life batteries • 2 AC adapter/charger units • 4 adapter cable assemblies • USB cable assembly • Compact flash card • Plan-Um™ design layout software • Deluxe carrying case with cushioned sides

Order Number: NT950

VIAS Number: NT950



Dedicated I/O Ports



Plan-Um™ Software



Validator NT950 Kit

# SmartClass Validator™ NT950

## 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

### Physical Characteristics

#### Physical Dimensions

- Main Unit  
Size: 22.9 x 11.4 x 5.3 cm  
(9 x 4.5 x 2.1 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 degrees C  
(32 to 122 degrees F)
- Storage temperature:  
-20 to 70 degrees C  
(-4 to 158 degrees F)
- Humidity:  
10 % to 85%, non-condensing

#### Interfaces

- USB cable assembly
- 32 Mb 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

### 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

