ValidatorPRO™-NT, Cu
Ethernet Network Management Tool

Key Features

- Conducts BER testing to speed certify Ethernet data transmission speed up to 1000Base-T (1 Gbps)

- Measures SNR and skew to uncover impairments to electrical Ethernet data transmission

- Tests for opens, shorts, split pairs, miswires, and reversals and measures distance to opens and shorts—supports all copper network, telco, and coax cables

- Performs PoE load test to ensure maximum power is available from PoE source

- Performs port discovery to detect advertised Ethernet speed and displays capabilities of network devices

- Pings network devices to verify connectivity to active equipment

- Includes Plan-Um® software to create network layout; document cable tests; show network topology; and record moves, adds, and changes

The ValidatorPRO-NT, Cu offers a complete solution for front-line IT technicians that manage daily moves, adds, changes (MACs) and troubleshoot user connectivity issues in a wired Ethernet environment. The ValidatorPRO-NT, Cu performs tests to determine the data-carrying capabilities of copper Ethernet network cables up to 1 Gbps (1000Base-T) by detecting faults in the cabling wiring, testing for noise in the network, and ensuring that cables can support the speed capabilities of active equipment with bit error rate tests. Distance to opens and shorts help isolate the location of cable faults.

The ValidatorPRO-NT, Cu includes a comprehensive set of features for testing a network's active network capabilities: measure Power over Ethernet (PoE) to ensure the maximum power is available on the correct pins, use port discovery to ensure the correct speed and duplex capability are advertised by the switch; connect at gigabit Ethernet and run ping tests to verify connectivity to IP hosts; discover network devices using Cisco Discovery Protocol (CDP) or Link Layer Discovery Protocol (LLDP).

ValidatorPRO-NT, Cu includes the powerful Plan-Um planning and reporting software used to plan network architectures, organize cable information, estimate cable length requirements, and document test results. Plan-Um helps set up each job, defines the scope of the job, aids in testing cable runs, and produces reports for the installer and customer. The Network Tools feature provides a quick view of the network architecture and lets users document moves, adds, and changes.

Applications

- Certify speed capability of electrical Ethernet cable runs to support 10/100/1000 Mbps Ethernet applications
- Ensure configuration and connectivity with active network devices, including PoE
- Document network topology including moves, adds, and changes

Specifications

General

Display	Color back-lit FSTN liquid crystal display (LCD)
Operating System	Linux
Keypad	Full navigations set with alphanumeric data entry and soft-key functions
Memory	
Non-volatile	Internal NAND flash memory
Volatile	128 MByte DDR2 SDRAM memory
Languages supported (GUI)	English, French, Italian, German, Spanish, Portuguese, Korean, and Simplified Chinese

Interfaces

USB 2.0 host port (for external memory sticks)

Test Connectors

– 8-position shielded modular jack (data)
– 6-position modular jack (telephone)
– F-coax (video) Male connector w/sacrificial adapter

Cable Types

– Shielded or unshielded twisted pair network cable
– Telephone
– Coax

Cable Length

Maximum cable length	2,000 ft (600 m)
Maximum cable length for testing of split pairs	Up to 100 m (327 ft), depending upon cable type
Cable length accuracy	±5% (after performing both unit and cable calibration)

Electrical

Power sources	AC adapter; auto cigarette lighter power adapter; lithium-ion rechargeable, removable batteries

Environmental

Operating temperature	0 to 50°C (32 to 122°F) (normal operation, not charging battery) 0 to 45°C (32 to 113°F) (charging battery)
Storage temperature	−20 to 60°C (−4 to 140°F)
Operating humidity	10 to 85% RH, non-condensing
Shock and Vibration minimum	2 ft drop (free fall from stationary) on concrete
Safety	EN 61010-1
EMI/EMC	EN 61326-1:2006
Altitude	4000 m

Agency Certifications and Compliance

Main and Remote units	CE
Battery	CE
AC wall adapter	CE, PSE, UL
Auto cigarette lighter power	CE

Calibration

Traceable Calibration Period	2 Years
Self-Calibration Period	30 days for unit calibration Perform cable calibration whenever changing cable type being measured.

Physical

Main Unit Size	22.9 x 11.4 x 5.3 cm (9 x 4.5 x 1.8 in)
Weight with battery	671 gm (1 lb 7.7 oz)

Remote

Size	14.2 x 11.2 x 4.4 cm (5.6 x 4.4 x 1.8 in)
Weight with battery	341 gm (12 oz)

Ordering Information (Models, options and accessories) — Part

	Part #
ValidatorPRO-NT, Cu Ethernet Network Management Tool	NT1055

ValidatorPRO-NT, Cu includes:

One smart remote, one set 1-8 wiremapping remotes (RJ11/RJ45) (TP612), two lithium-ion rechargeable batteries (NT93), two universal AC adapter/charger units, two 30.48 cm (1 ft) patch cables with RJ45 connectors, two sacrificial cables for RJ45 mod plug, one coupler F-jack to F-jack, USB flash drive including Plan-Um cabling installation and planning software, user guide (product manual), firmware, Deluxe carrying case, 100 "speed certified" cable labels, and one 12 V vehicle charger.

Accessories

Lithium-ion rechargeable battery	NT93
Cable speed certified labels, roll of 100	NT95
19 cm (7.5 in) RJ12-to-RJ12 cable for no-fault connection to RJ11 or RJ45 jacks	TP20
30.48 cm (1 ft) patch cable with RJ45 connectors	TP55
F-connector plug to BNC jack adapter	TP62
60.96 cm (2 ft) RJ45 to 8 alligator clips cord set	TP68
Sacrificial cable for RJ45 mod plug	TP74
Set of 20 (1–20) Coax ID-only remotes	TP311
Set of 20 (1-20) RJ45 ID-only remote identifiers	TP312
Set of 20 (1-20) RJ11 ID-only remote identifiers	TP314

Test & Measurement Regional Sales