ETHERNET SPEED CERTIFIER

MADE IN THE USA

Test & Speed Certify Ethernet Network Cables to 1 GB

The Net Chaser™ Ethernet Speed Certifier offers a complete solution to test and speed certify the data-carrying capabilities of Ethernet network cables up to 1 Gb/s by testing for noise in the network, detecting faults in the cable wiring, and ensuring that cables are able to support the speed capabilities of active equipment.

- **Speed Certification to IEEE standards 802.3**
- **Cable testing to TIA568A/B**

The NetChaser's advanced discovery gives the clearest vision of network layout and interfaces between active components like servers, switches, routers, etc. All the information is collected, stored, and ready for reporting. 21st century speed certification.

- **Pings specific IPs or URL addresses**
- **DHCP**
- **Traceroute**
- **VLAN**

Net Chaser™

NC950, NC950-AR

NET CHASER TEST RESULTS

Cable ID	Type	Length	Result	BERT	SKEW	SNR
CABLE001	CAT6	256	**Pass**	1 Gbps	23.1	25
CABLE002	CAT6	175	**Pass**	1 Gbps	22	27
CABLE003	CAT6	154	**Pass**	1 Gbps	22.1	26.5
CABLE004	CAT6	120	**Pass**	100 Mbps	20	26
CABLE005	CAT5	98	**Pass**	100 Mbps	21	28.3
				00 Mbps	23	25.5
				bps	18.7	22.5
				bps	18	27.1
				Gbps	22	27
				bps	22.1	26.5
				0 Mbps	21	28.3
				0 Mbps	23	25.5
				Gbps	23.1	25
				Gbps	18	27.3
				bps	22	27

Cable Testing

To certify Ethernet speed performance of cable runs, the Net Chaser™ conducts Bit Error Rate (BER) tests (using Active Remote) by sending data packets down specified cable runs at defined data rates to check for errors at the maximum throughput of the link. The Net Chaser™ reports on signal quality that can impact high-speed data transmission by measuring signal-to-noise ratio (SNR). Skew measurements report on the signal time delay between pairs that can impact Gigabit data transmission. Finally, the Net Chaser™ unit provides continuity testing that detects opens, shorts, miswires, split pairs, reversals, and high-resistance faults while accurately measuring distance to faults and total cable length.

- Measures and displays length for each pair in feet or meters
- Improperly terminated cables are clearly displayed on a color graphical wire-mapping display
- Detects Length to Opens & Shorts
- Verifies Continuity for RJ45, and Coax cables
- Saves test results and easily uploaded to a computer
- Tone Generation
- ID Only remotes (Network and Coax) - up to 20 available.
- Testing and ID Remotes - up to 8 available.

Network Configuration and Capability Testing

The Net Chaser™ includes a comprehensive set of features for testing active network capabilities: measure Power over Ethernet (PoE) to ensure the correct power is available on the correct pins, use Port Discovery to ensure the correct speed and duplex capability are available; 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); VLAN discovery; Traceroute function displays the path internet packets travel to reach a specified destination. The Net Chaser™ also saves test reports and exports to PC's.

- Active Ethernet (Link Capability & Link Status)
- Detects PoE/PoE+ and load test for voltage drop
- IPV4 Support (IPV6 available late 2014)
- VLAN Discovery
- Ping to a specific IP or URL address
- Ping up to 10 addresses at a time
- Link Light
- DHCP
- Discovers CDP and LLDP Protocols
- Traceroute

NET CHASER PING TARGETS

Target	Rx/Tx	Avg ms	M
192.168.5.1	5/5	1100.0	1
WWW.YAHOO.COM	5/5	700.0	
68.7.54.2	5/5	1300.0	
2000:0DB8:85AC::CFFF	5/5	700.0	
10.1.1.254	5/5	1300.0	
WWW.WAN.COM	5/5	1100.0	
192.168.5.24	5/5	1100.0	
10.4.78.96	5/5	900.0	
10.1.1.254	5/5	1300.0	
3000:0DB8:85AC::CFFE	5/5	700.0	
192.168.5.68	5/5	1100.0	
192.168.5.2	5/5	1100.0	
192.168.5.44	5/5	1100.0	
2000:0DB8:85AC::CFFF	5/5	700.0	
2000:0DA4:85AC::CFFE	5/5	700.0	
10.4.78.85	5/5	900.0	

Net Chaser™ Kit Options

Net Chaser™ with Active Remote
NC950-AR

- Net Chaser™ main unit
- Active remote
- Power supply
- 4 GB SD card
- Micro USB
- #1 Testing network remote
- Network and coax remote set: #1-5, F-Conn coupler includes foam holder
- Network patch cable (2)
- Sacrificial cable (2)
- T3 hanging strap and clip
- Large T3 carrying case

Net Chaser™ without Active Remote
NC950

- Net Chaser™ main unit
- Power supply
- 4 GB SD card
- Micro USB
- #1 Testing network remote
- Network and coax remote set: #1-5, F-Conn coupler includes foam holder
- Network patch cable (2)
- Sacrificial cable (2)
- T3 hanging strap and clip
- Large T3 carrying case

Active Remote Required for BER Test

Optional Accessories

Model	Description
TT108	#1-8 Network/Tel Testing and ID Remotes
RK120	#1-20 ID Only Coax Remotes
RK220	#1-20 ID Only Network Remotes
AK030	Network Accessory Kit
AR104	Net Chaser Active Remote with selectable ID # 1-4

PHYSICAL FEATURES

- 3.5" Color Touch Screen Display
- Compact Form Factor
- 3rd Generation Rechargeable Lithium-Ion Batteries
- Benchtop, Handheld, or Hung Up
- Uses Modular Cable Interfaces
- SD Card for Data File Transfer of Cable Tests
- Field-Upgradeable Firmware

T3 HANGING STRAP & CLIP

CONNECTORS

- 8-Position shielded modular jack (Data)
- F-coax (video)

SPECIFICATIONS

Measurement Technology	Time Domain Reflectometry & Capacitance
Power	U.S. Patents and Patents Pending Wall power voltage input Range: 10→28V, 20W Net Chaser will run with wall power down to 4V, however batteries will not charge unless input voltage is greater than 10V. Battery pack with four LIO Rechargeable Cells. Full screen brightness, dynamic test, 7.8V battery: 335mA. 0⟶100% brightness, @7.8V: 90mA Typical battery current: 185mA Low power mode (or timed out): 70mA Off mode: 420 µA board (+500uA battery pack circuitry.)
Output Connectors	8-Position shielded modular jack (Data) F-coax (video)
Interfaces	Micro USB, SD flash card
Battery Life	Battery Pack, initial 5200 mA-hr (typical): Operating at cable test screen or occasional Ethernet test: 6-8 hours 185mA (assuming 65% LCD brightness) Low power: 70mA, assuming full charge of 5000mAH, 71 hours. Off: 420 µA board (+500uA battery pack circuitry.)
Altitude Altitude	10,000 ft. (3,048 m) operating
Temperature Operating:	(-10 if standard crystal) -20 to 70°C); (-30 to 80°C)
Humidity	10 to 90% non-condensing
Enclosure	High-strength PC/ABS plastic with V0 rating with boot
Size	2.41"H x 4.18"W x 9.03"L (6.12 x 10.61 x 22.94 cm)
Weight	With batteries: 1 lb 12 oz
Warranty	1 Year

ACTIVE REMOTE (AR104)

- User-selectable ID #1-4
- Pass or fail indication
- Lithium-ion batteries

SIGNAL QUALITY TESTING

- Length of cable distance to Opens and Shorts
- SKEW
- Echo Testing (Return Loss) - impedance mismatches
- Signal to Noise Ratio
  - » Attenuation
  - » Amplitude
  - » Return Loss

PERFORMANCE AND SPEED CERTIFICATION

- Supports IEEE 802.3 signal speed carrying specifications to 1 gigabit
- Test interconnect specifications per TI568/570
- Measures the quality of the signal through the cable against set criteria on cable data-carrying capability in real time. 100Mbit/gigabit speeds
- Real-time testing on the performance capability of the cable

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