

Agilent N2620A FrameScope™ Pro

Handheld Gigabit Ethernet Troubleshooting
and RFC 2544 Performance Testing

Data Sheet

Introducing the FrameScope™ Pro

The FrameScope™ Pro is Agilent's handheld 10/100/1000 Mbit/s Ethernet deployment and troubleshooting tool. With the FrameScope™ Pro, technicians deploying Ethernet in Metro networks now have a fast, efficient and very cost effective test solution for measuring bandwidth at line rates from 1 Mbit/s to 1 Gbit/s.

The FrameScope™ Pro's color touch screen and online manuals make it very easy to use and the predefined performance test suites allow the technician to run tests by pressing a single button.

The FrameScope™ Pro also has a complete toolkit for testing enterprise networks: Agilent's unique Autotest will measure the performance of network resources and services using the same operations that an end user would execute, and then present detail on each operation and compare the measured performance against predefined, yet customizable performance metrics.



Features and Benefits

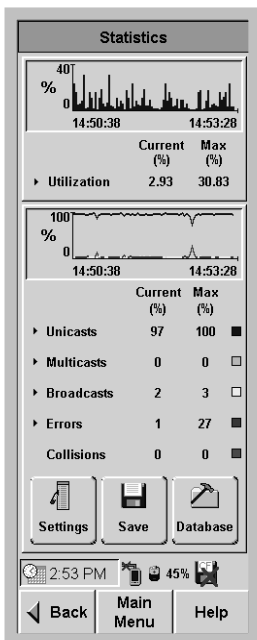
- Supports 802.3z-compliant 10/100/1000BASE-T copper and 1000BASE-SX/LX/ZX gigabit fiber SFP interfaces.
- RFC 2544 performance benchmarking verifies throughput at full line rate on both copper and fiber Ethernet interfaces at speeds from 1 Mbit/s to 1 Gbit/s.
- Autotest application performance testing allows for quick isolation of protocol, configuration and resource performance problems.
- Automatic Network Discovery simplifies use and documents network resources and stations
- Remote control via any web browser allows troubleshooting, monitoring, and reporting from central office, eliminating costly dispatches
- Configurable VLAN and QoS settings
- Full-screen, color LCD displays clear and complete results
- Touch-screen interface and online manuals enhance ease of use.

Automatic Network Discovery

The FrameScope™ Pro automatically surveys the network and displays all devices in a switched network, giving support staff instant visibility into the IP and IPX devices on different subnets, along with their MAC addresses, Network addresses, and names.

Quickly Diagnose and Troubleshoot Network Problems

With just a few clicks, FrameScope™ Pro allows you to identify 10/100/1000 Mbit/s Ethernet utilization, broadcasts, collisions and errors, or pinpoint incorrectly assigned subnet masks, misconfigured servers, and duplicate IP addresses.

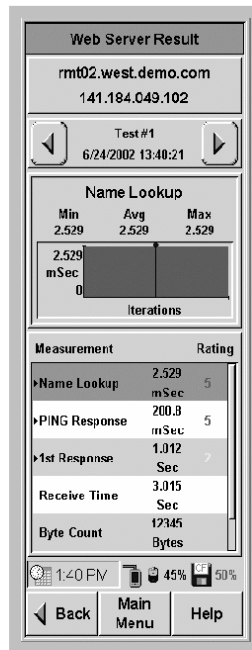


RFC 2544 Performance Benchmark Testing From the People Who Wrote the Book of Performance Testing

The FrameScope™ Pro is a powerful Ethernet deployment tool capable of throughput, latency, back-to-back frames and frame loss measurements for SLA verification and performance testing. It uses a standardized point-to-point testing method defined by RFC 2544. The test results can be stored on the CompactFlash™ card or viewed and printed via the remote interface.

Automated and Simplified Network Service Testing and Pre-Qualification

FrameScope™ Pro Autotest uses an innovative technique to objectively measure and benchmark the performance of network application servers, and produces detailed reports on the performance metrics. This unique feature is useful for both troubleshooting and network pre-qualification.



Configurable Line Rates from 1 Mbit/s to 1 Gbit/s

FrameScope™ Pro gives guaranteed performance at full 1 Gbit/s line rate on both copper and fiber interfaces. It supports configuration of the link line rate that makes the testing fast and more efficient: you test only for the bit rates you (and your customers) are interested in. RJ45 port for copper networks and SFP (Small Form-factor Pluggable) for fiber networks.

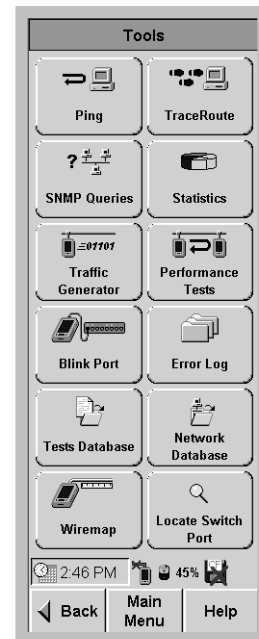


Complete network troubleshooting tool kit

FrameScope™ Pro contains a complete arsenal for troubleshooting tools from Ping and Trace Route to traffic generation and statistical analysis of the traffic breakdown.

Network Security

Network security is about knowing who is accessing the network and what type of traffic they are generating. Using the Network database rogue stations can be found and identified.



Future Enhancements

As technology advances, FrameScope™ Pro is ready. The compute engine and operating system allow for many future enhancements and the Card Bus slot enables the use of PCMCIA cards for additional expansion.

Technical Specifications

Test Interfaces

- 10/100/1000BASE-T copper interface
- Supported SFP fiber interfaces: SX, LX and ZX

Supported Protocols

- IP, IPX, NetBIOS

Supported Tests

- Autotest performance measurement of Email, Web, File, DNS, DHCP, WNS, Novell, Print, FTP, Primary DC, Secondary DC Servers, Switches and Routers.
- Ping, Trace Route, and SNMP Queries verify connectivity to user-defined devices.
- Statistical analysis of the network condition.
- Traffic Generator up to full line rate at 10/100/1000 Mbit/s speeds.
- RFC 2544 tests for throughput, latency, back-to-back frames and frame loss measurement at full 1 Gbit/s line rate.
- VLAN tag and priority fields are configurable.
- QoS IP TOS and DSCP settings are configurable.
- IP and MAC Loopback measure precise roundtrip delay at layer 2 (MAC) or layer 3 (IP).
- Locate Switch Port & Blink Hub Port locates live network cable connections.
- Network Database stores station information.
- Wiremap Test to locate miswires using the Wiremap Adapter.



Memory

32 MB CompactFlash™ card included

Power

Removable/Rechargeable Lithium Ion batteries

Battery life:
5 to 8 hours of operation

AC Power adapter:
100 – 240 V AC, 0.5 A, 47 – 63 Hz
(output 12 V DC, 1.5 A)
The AC power adapter plugs directly into the battery pack. The battery can be recharged outside the instrument.

User Interface

2.38" x 6.25" (60 mm x 160 mm)
touch-sensitive color LCD display
screen

Dimensions

Size: 9" x 4.5" x 2.6"
(228 mm x 114 mm x 66 mm)

Weight: 2.5 lbs. (1.2 kg)

Ports

- Universal Serial Bus (USB 1.1)
- Talkset Interface:
3.5 mm stereo jack
- CardBus Interface

Operating temperature

0°C to +40°C

Storage temperature

–10°C to +55°C

Relative humidity

10% to 90%

Ordering Information

N2620A-001
FrameScope™ Pro Ethernet

Recommended Accessories

N2620A-050
Multimode SFP Transceiver,
1000BASE-SX, 850 nm

N2620A-051
Single Mode SFP Transceiver,
1000BASE-LX, 1200 – 1600 nm

N2614A-001
Wiremap Adapter

N2595A-096
Rechargeable Battery Pack

N2620A-080
Universal AC Adapter

N2605A-090
Accessory Kit (replacement stylus,
display cover, dust caps, etc.)



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