

Handheld Gigabit Ethernet Troubleshooting and Performance Analysis for Metro and Enterprise Networks



- Supports both copper 10/100/1000BASE-T and fiber 1000BASE-SX/LX interfaces
- RFC 2544 performance benchmarking verifies throughput at full line rate on both copper and fiber Ethernet interfaces at any speed up 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
- · PPPoE support enables the full set of tests over subscriber lines







Quickly Diagnose and Troubleshoot Network Problems

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 any rate up to 1 Gbit/s. FrameScope™ Pro connects via RJ45 port for copper networks and SFP (Small Form-factor Pluggable) interfaces for fiber networks.

RFC 2544 Performance Benchmark 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 complete toolkit for testing enterprise networks is useful for both troubleshooting and network pre-qualification.

Complete Network Troubleshooting Tool Kit

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

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.

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.

Optional Upgrades

As your needs grow, FrameScope™ Pro is ready: for example, Voice over IP quality testing is enabled via a license code. Smaller enhancements are made available through free software upgrades.



The FrameScope™ Pro is Agilent's handheld 10/100/1000 Mbit/s Ethernet deployment and troubleshooting tool.

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

Remote control and web interface allow central troubleshooting, monitoring and reporting.

www.framescope.com



FrameScope Pro™ Specifications

Test Interfaces

- RJ45 10/100/1000BASE-T copper interfaces
- Supported SFP fiber interfaces: 1000BASE-SX and -LX
- 100BASE-FX through optional media converter.

Supported Protocols

IP, IPX, NetBIOS, PPPoE

Supported Tests

- Autotest performance measurement of Email, Web, FTP, 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, backto-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.
- · Optional: Wiremap Test to locate miswiring.

Memory

 Type 1 ComplactFlash™ memory allows for flexible test record storage.
 256 MByte CF card included

Powe

- Removable/Rechargeable Lithium Ion batteries
- Battery life: 5 to 8 hours of operation

User Interface

• 2.38" x 6.25" (60 mm x 160 mm) touchsensitive 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

- RJ45 10/100/1000BASE-T Ethernet port
- SFP port for 1000BASE-SX or -LX 1 Gbit/s fiber connections
- Optional RJ45 Wiremap test port or Auxiliary 10/100 Mbit/s Ethernet port
- Universal Serial Bus (USB 1.1)
- Talkset Interface: 3.5 mm stereo jack"

Ordering Information FrameScope™ Pro Product Kit Contents

(1) FrameScope[™] Pro, (1) Universal AC Adapter, (1) Rechargeable Battery Pack, (1) CF Memory Card, (1) Nylon Carrying Case, (1) USB Cable, (1) Hanging Strap, (1) FrameScope[™] Pro Utilities CD, (1) FrameScope[™] Pro Users Guide, (1) RFC 2544 Testing License

N2620A-001 - FrameScope™ Pro Ethernet Must choose one from:

N2620A-040 - Wiremap port for Wiremap testing (requires Wiremap Adapter)
N2620A-041 - Auxiliary 10/100 Mbit/s
Ethernet Port for remote control across another network

Recommended Accessories

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

N2620A-051 - Single Mode SFP Transceiver, 1000BASE-LX

 $\label{eq:N26220A-053} \textbf{N26220A-053} \textbf{ - Media Converter,}$

100BASE-FX, USB powered

N2614A-001 - Wiremap Adapter

N2595A-094 - Auto Lighter DC Power Adaptor

N2595A-096 - Rechargeable Battery Pack

N2620A-080 - Universal AC Adapter

For more information refer to the FrameScope $\mathsf{Pro}^{\mathbb{I}\!\mathsf{M}}$ Data Sheet 5989-1908EN

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