OptiView® Series III
Portable Wired/Wireless Network Analyzer

Part of the OptiView Management Suite (OMS)

OMS provides the breadth of visibility and depth of analysis for a complete picture of network and application performance. It's the only solution that combines proactive monitoring with in-depth "on-the-wire" analysis and portability to see problems up close – anywhere on the network.

By combining best of breed solutions for monitoring, analysis and troubleshooting, OMS can be used as a holistic management suite or part of your IT organization's tool-set, to help reduce complexity and improve productivity in your team's daily workflow.

OptiView Portable Analyzer

as part of the OMS, the portable OptiView Network Analyzer provides wired or wireless analysis anywhere in the network, allowing the user to monitor and capture the end-user experience "on-the-wire". It is a portable network management tool designed to help network professionals in their daily tasks:

- Troubleshoot network and application performance problems
- Ensure network uptime and infrastructure availability
- Manage daily operations
- Ensure compliance with regulations and standards
- Provide management with accurate reporting and documentation

The OptiView Network Analyzer is like having a "virtual network engineer" with its advanced network analysis features, built-in expert advice and all-in-one capability for troubleshooting, monitoring, trending and alerting – you can manage the core, remote sites or critical network points with a single tool.

OptiView Series III new release features:

- **10 Gigabit Interface Monitoring** – More IT organizations are deploying 10G in data centers - now OptiView gives you visibility into those critical links.
- **More Powerful Discovery** – More efficient SNMP queries speeds discovery times, while separate in/out full-duplex multi-port statistics for all interfaces provides better understanding of traffic flows.
- **Integrated NetAlly Agent** – Used in conjunction with the optional NetAlly Test Center software, this enables the OptiView to be an

agent end-point when conducting NetAlly application analysis or VoIP assessments.

- **AirMagnet** – OptiView's optional wireless analysis now features the award-winning AirMagnet Wi-Fi Analyzer.

Troubleshoot network and application performance problems – fast.

When problems happen, your job is to fix it – fast – and perform deeper analysis for determining the root cause. The OptiView Network Analyzer helps you resolve network performance issues in real-time using vendor-independent infrastructure analysis, on-the-wire traffic analysis, and full-line rate packet capture/decode. Expert-assisted protocol analysis provides guidance – not just data – to solve tough problems, even if you're not a packet decode geek.

Ensure network uptime and infrastructure availability

Optimize network equipment to minimize outages and degradations. Eliminate unwanted applications and enforce traffic and bandwidth policies through deep traffic analysis. Validate VLAN configurations and network health; audit switch/router configurations and performance. Conduct response time analysis of key business applications from source to end-user perspective.

Manage daily operations

Reduce time on projects and network changes. Assess, verify and prove network readiness for new applications, new technologies and infrastructure deployment. Conduct network discovery, traffic analysis, infrastructure device analysis and documentation. Deploy, secure and troubleshoot wireless LANs.

Ensure compliance with regulations and standards

Maintain network integrity by discovering unauthorized devices and misuse of network equipment. Perform routine audits to identify regulatory compliance violations (HIPAA, PCI, SOX). Verify 802.1x configurations, SNMP community strings and MAC level port security.

Provide management with accurate reporting and documentation

Save huge amounts of time and keep documentation up-to-date with OptiView's automated reporting function. When used with OptiView Reporter, generate inventory and daily performance reports, and with Visio, automatically create network maps.

Technical Datasheet

"On the Wire" Analysis

Traffic analysis at the touch of a button

The OptiView Series III provides real-time statistics for traffic on the wire which enables the user to understand how network resources are being used and increase user satisfaction with faster response times for networked applications.

Quickly and easily identify top talkers, multicasters and broadcasters or select top conversations to determine which hosts may be over utilizing resource bandwidth. Determine who is using server bandwidth by viewing top conversations to a single host.

Analyze protocol mix to identify top protocols being used and also discover unwanted and custom protocols and see which protocols are being used by each host.
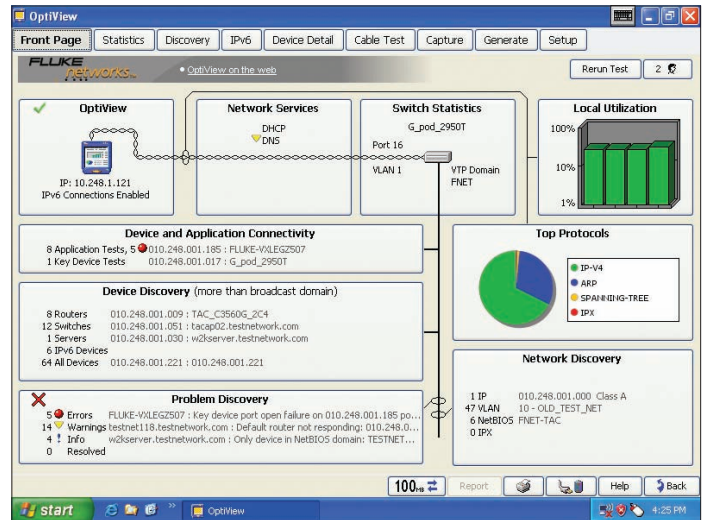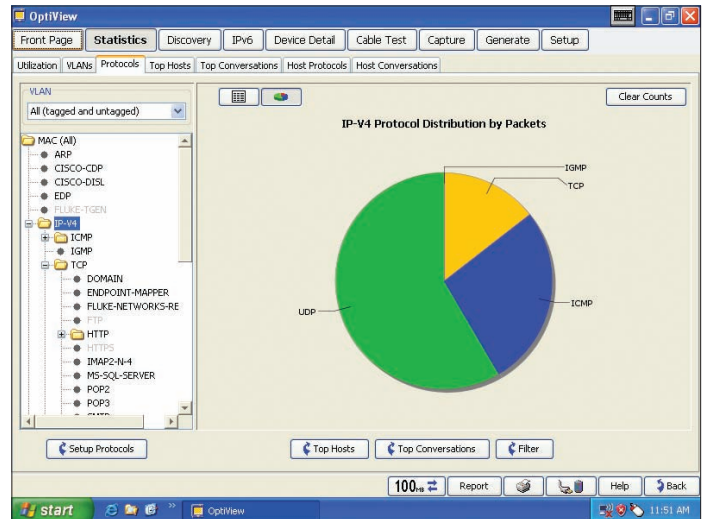
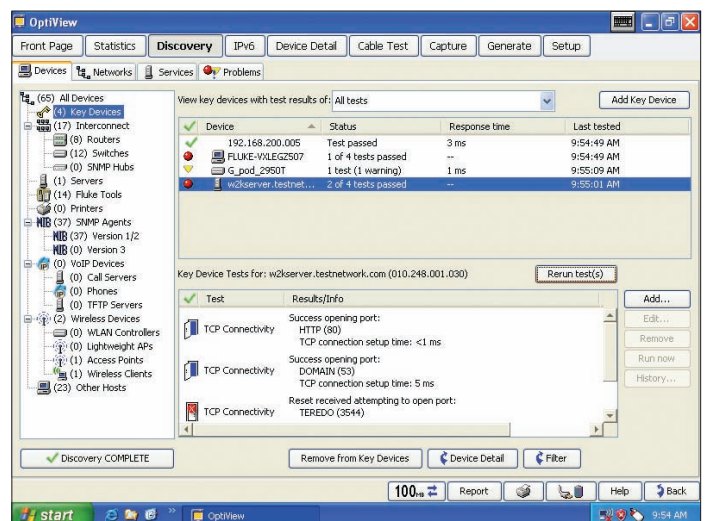### Application analysis and troubleshooting

Automatically discover all protocols and sub protocols from the MAC layer to the application layer. This enables IT staff to identify applications utilizing link bandwidth including those that use dynamically assigned port numbers to see and validate the impact of applications on bandwidth usage and also identify the use of illicit applications. Deep packet inspection differentiates between specific audio, video, image, and data applications, and shows the level of bandwidth usage of each.

Perform application analysis in real-time on Gigabit links and determine the specific endpoints (server, host) using that application. A combination of layer 2 and layer 3 trace routes identifies the entire network path between the application client and the application server, speeding problem isolation.

Speed up troubleshooting application and network performance issues by automatically validating that network services such as DHCP, DNS and 802.1X are available and operating correctly, ensuring that server and application connectivity is accessible by opening specific TCP IPv4 and IPv6 ports on servers and reporting the round trip time as a combination of network latency and server connection set up time. Ensure WIN servers are operating efficiently by viewing resources including number of users, processor, memory and disk utilization and services and process that are running.

Front page

Protocol mix

Application Troubleshooting Expert Active Tests

VLAN Visibility and Trunk Analysis

Only "on the wire" analyzers can provide vision into actual VLAN trunk traffic. When connected to a switch trunk port, the analyzer will detect all VLANs available on that trunk, measure the traffic distribution across all the VLANs and provides the user with the capability of selecting a specific VLAN. If an individual VLAN is selected, device discovery, traffic statistics and packet capture data will only be displayed for that VLAN.

Application-Centric Protocol Analysis

### Full-line rate capture ensures complete analysis

Get Gigabit line rate packet capture and filtering to troubleshoot problems where packet level analysis is required and perform advanced troubleshooting when deploying and analyzing applications.

Sophisticated capture filters allow collection of more relevant data and limit the amount of traffic to analyze by filtering on individual addresses or conversation, address range for IPV4, IPv4 subnet, IPv6 prefix and protocols.

The capture process may be started or stopped through a user defined trigger event – capture the traffic before, after or around an event occurrence without being present. This ensures you capture the event the first time and avoids initiating random traffic captures that may not contain anything of interest.

Free String Match to find and capture anything

Match any set of words or phrases when detected (regardless of the position in the packet – payload or header) in real-time to trigger the analyzer to start or stop capturing and/or filter traffic. Use free string match to capture traffic around any application error message, detect traffic containing certain words or phrases in non-encrypted emails, web pages, file transfers or documents to identify illicit use of the network or detect downloading of restricted documents based on content or filenames (.doc, .xls, .pdf). Additionally, use free string match to identify and track applications that are not allowed on the network such as streaming media that may consume valuable bandwidth, or P2P traffic that may pose a security risk. A total of eight sets of triggers or filters can be defined to trigger a capture unattended for later analysis, allowing analysis when you have time, not when the event occurred.
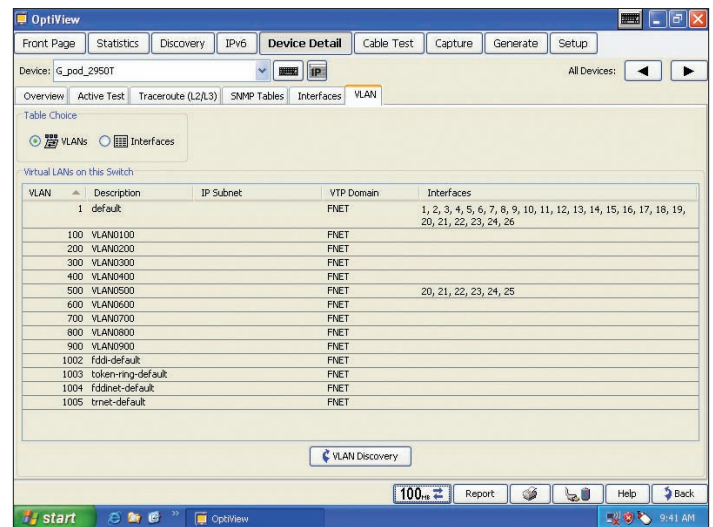
VLAN statistics
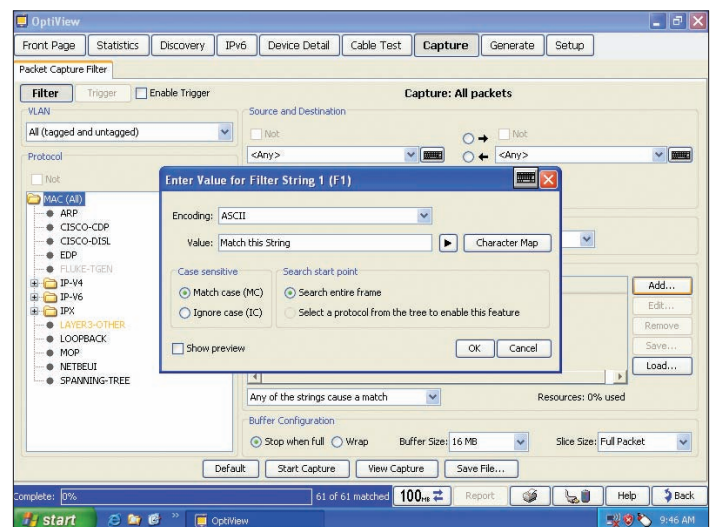
Free String Match setup

Application-centric analysis for simplified troubleshooting of application problems

Once traffic is captured, launch the ClearSight Analyzer* (CSA) to see an application-centric view of the trace file. Through a simple and intuitive front page, CSA presents a comprehensive, high-level overview of the health of applications on your network. From that framework, you can drill down to gain access to more detailed information. For example, you can display all the activity for HTTP applications, then drill down to see activities on each server, and further down to the server flow to observe the actual media content of the flow. This unparalleled level of control and visibility speeds time to application problem resolution and minimizes overall network downtime.

Note: The optional ClearSight Analyzer software (CSN/CSA-1000) is required to be installed on the PC controlling the OptiView Management Appliance in order to decode and analyze captured traffic.

Application Summary Front Page

Automated problem/issue detection

The CSA Expert Alert function automatically detects communication faults in captured packets and displays them with color coded icons. The specific application, server, or flow that has a problem can be seen at a glance from the Application Summary Front Page. Alerts detected by CSA are classified as issues (faults in the communication sequence) or problems (faults that exceed a threshold value) and can be listed separately. Lists can be sorted by simply clicking on a column header. You can drill down to the associated communication flow by right-clicking on an alert.

## Unique and powerful ladder chart illustrates application flow

CSA ladder views (also known as application bounce chart) reveal conversations between client and server in the application command language without having to decode packets manually. It provides an extremely powerful way to understand protocol interactions between various network elements.

Ladder chart

## Content Reconstruction and Playback

You can recreate audio and video content from VoIP or video flows, either during real-time monitoring or from a tracefile. In addition, Microsoft® Exchange® email, Fax over IP, Instant Messages and HTTP-based web pages can also be reconstructed. This is very valuable as proof of compliance violation or visualization of multimedia quality.
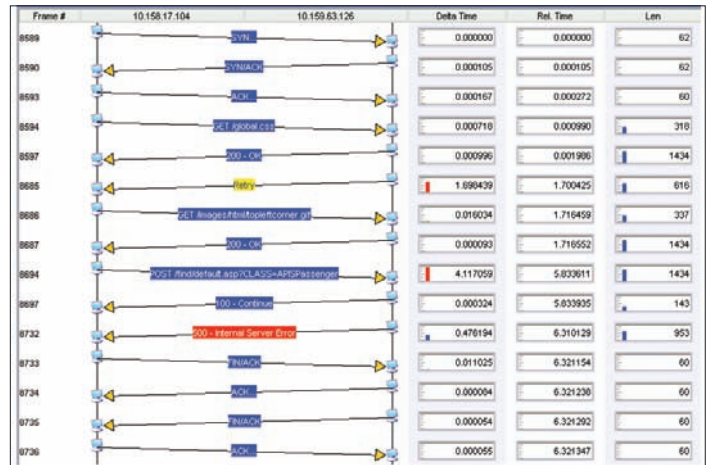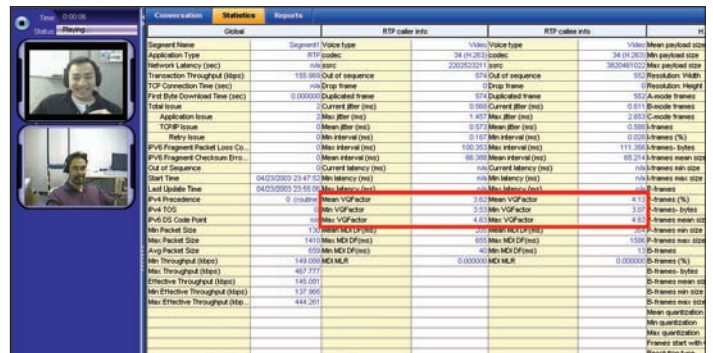
Reconstruct audio and video

Advanced Network Discovery

Finds devices, networks and problems in seconds

As soon as the analyzer is connected to the network, it automatically begins to discover devices on the network, with no interaction required, by monitoring traffic and actively querying hosts. IT staff can immediately see what is on the network and where it is connected, by switch, slot and port number. They can investigate and quickly locate "suspect" devices and with minimum effort identify problems associated with device mis-configurations.

The analyzer categorizes devices by type: interconnect (routers, switches, and SNMP hubs), servers, printers, SNMP agents, VoIP devices, wireless devices, and other hosts. Additionally, networks are classified by IPv4 and IPv6 Subnets, VLANs, NetBIOS Domains and IPX Networks, and Wireless Networks together with host membership within each classification. Network devices that may be experiencing problems are also discovered. Examples of problems detected are: duplicate IP addresses, incorrect subnet masks, default router not responding and many more.

Most network analyzers and troubleshooting tools have limited visibility in today's networks: usually a single broadcast domain or VLAN, but the OptiView analyzer can also be configured to perform a discovery on an off-broadcast domain subnet to extend its discovery beyond the broadcast domain or local VLAN boundaries, across your enterprise network, into remote sites and users. Generate up-to-date HTML format inventory reports of devices both on the attached network and also on networks at remote sites.

VoIP and wireless device discovery

The analyzer will discover VoIP devices including call managers and IP phones from Cisco, Nortel, Avaya and Mitel. Device capabilities and configurations may be viewed, allowing the user to easily identify and correct configuration issues during VoIP deployment.

The analyzer also discovers and categorizes wireless LAN controllers, lightweight access points, intelligent access points and wireless clients. Detailed device information is provided from Cisco Wireless LAN controllers and LWAPs, including the wireless networks associated with the controller, the SSIDs, security and QoS parameters, the lightweight APs being controlled and the 802.11 protocol in use. Additional information is available for each wireless client including the name, IP and MAC address, the 802.11 protocol used, RSSI (Receive Signal Strength Indicator) and SNR (Signal to Noise Ratio) and the client status
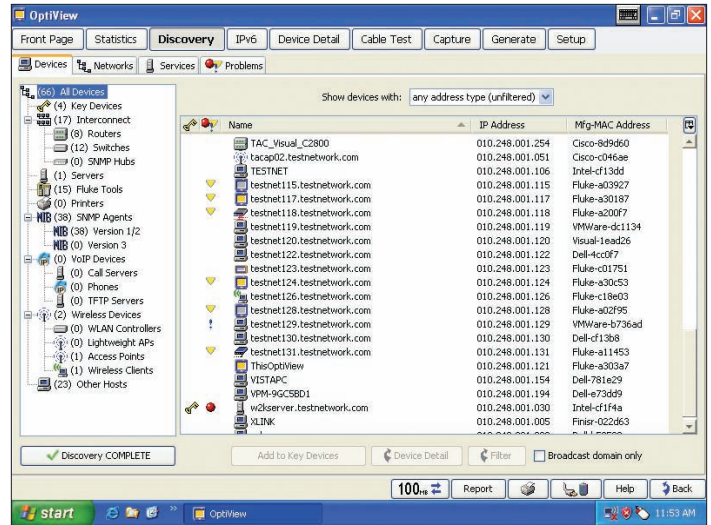
Device discovery
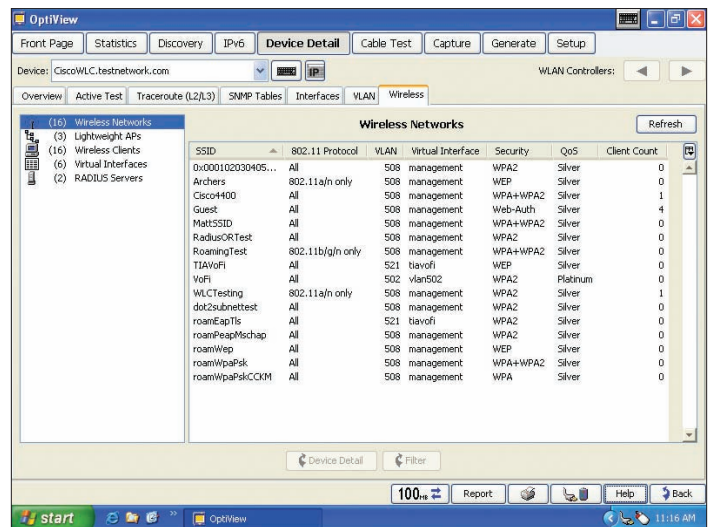
Wireless Network Discovery

Infrastructure Analysis

Real-time infrastructure device analysis data speeds trouble-shooting

Get granular, real-time data into interface utilization and errors via SNMP – essential for troubleshooting persistent problems and determining if excessive traffic and bandwidth utilization is the cause of performance problems.

Interfaces can be quickly sorted by I/F index, utilization, broadcasts, errors, or collisions. LAN and WAN errors, alarms and utilization details are available in the trending view along with interface configuration information.

In-depth analysis, including:

- A tabular view of all switch port configurations, including the identity of each host and where it is connected to the switch for both layer 2 and 3.

- A graphical view of utilization and error rates on each switch port to see over subscribed or errored ports at a glance.

Detect over-utilization, excessive errors, and locate inactive switch ports to determine if performance problems are related to link speed or duplex mis-configurations, or are related to the number of hosts on a port.
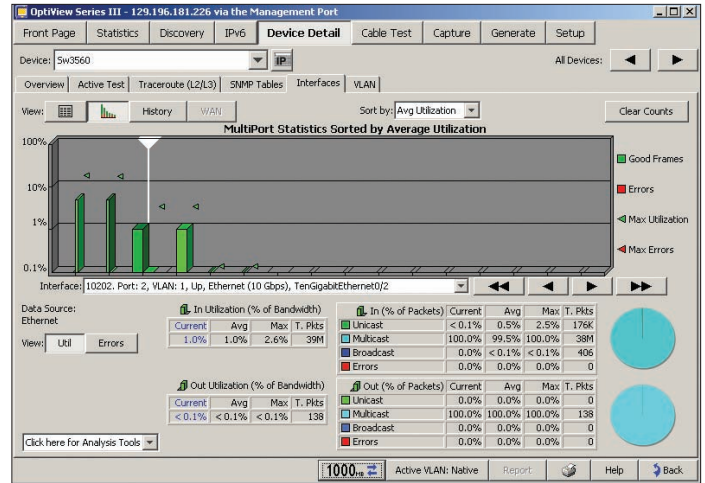
VLAN analysis

Determine if connectivity problems are related to VLAN configuration by seeing information such as:

- VLANs that are configured on the switch.
- Interfaces that are members of each VLAN.
- Identification of trunk or uplink ports, together with the trunking protocol in use.
- Identification of which hosts are members of each VLAN.
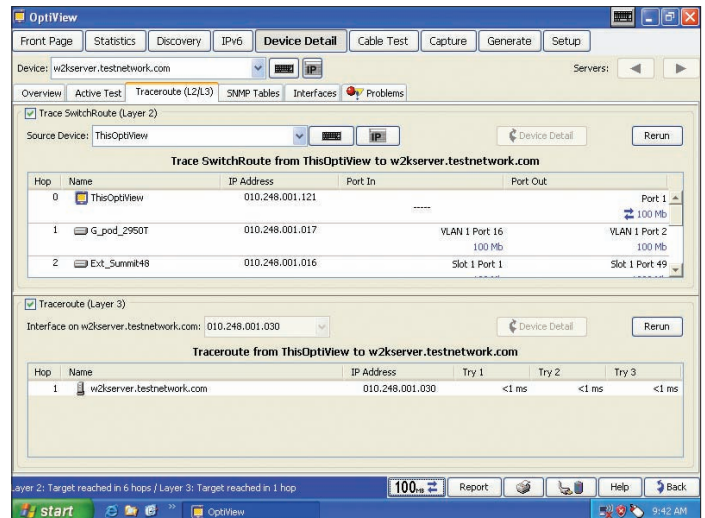
Trace SwitchRoute™

Trace SwitchRoute allows you to see the exact path two devices use to communicate through your switch fabric. Trace SwitchRoute begins its discovery from the specified Source Device and traces the path to the specified Target Device. For each switch in the path, the displayed results include the DNS name and IP address, the inter-switch connections by port number, together with link speed and VLAN information. Highlighting any device in the Trace SwitchRoute name column and selecting Host Detail allows you to view that device's network configuration information.

Real-time multi-port interface statistics - including 10Gig Multi-port statistics
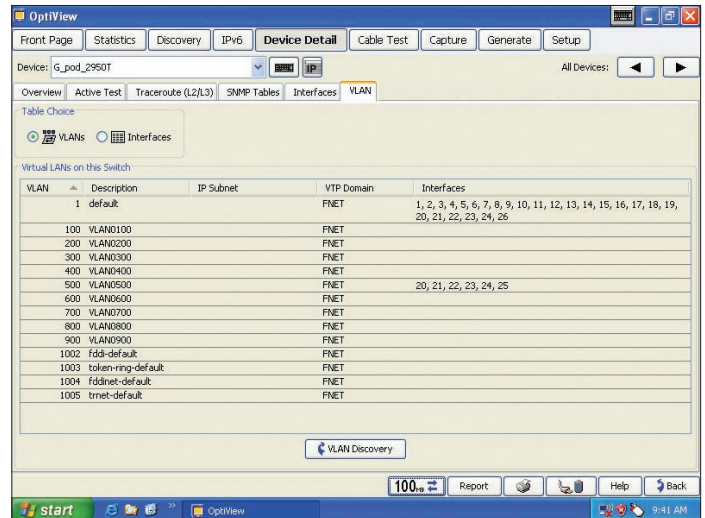
Discovery of switch VLAN configurations

Trace SwitchRoute

Router and WAN link analysis

In-depth device analysis identifies Router ARP cache or routing table errors and also provides visibility to manage and troubleshoot costly WAN links. See WAN link configuration, a graphical display of utilization and error rates and identification of specific error types on ISDN, Frame Relay, T1/E1, T3 and ATM links.

Telnet and web browser links to allow reconfiguration of devices directly from the analyzer.

Traffic generation and throughput

Assess network readiness for new deployments by determining the impact of the new application, or the addition of network users, by stressing your network with simulated traffic – up to full 1 Gbps.

Protocol type, frame size, frame rate, percentage utilization and number of frames to transmit are user configurable, along with the type of traffic: Broadcast, Multicast or Unicast.

Selectable protocols include: Benign Ethernet, Benign LLC 802.2, NetBEUI, Benign IP, IP ICMP Echo, IP UDP Echo, IP UDP Discard, IP UDP NFS and IP UDP NetBIOS. Selecting an IP protocol allows you to select Time to Live (TTL) parameters and TOS (QOS) parameters such as Minimum Delay, Maximum Throughput, Maximum Reliability, Minimum Monetary Cost and Maximum Security to ensure correct routing configurations.

The throughput test will, measure bidirectional data flow between two Fluke Networks devices to validate LAN and WAN throughput capabilities. The throughput test requires a second device to communicate with on your network. That second device can either be an OptiView Portable Analyzer or Management Appliance, or an EtherScope™ or OneTouch™ Network Assistant, or LinkRunner Pro Reflector.

The Throughput test allows you to configure the following parameters:

- Data speed (up to 1 G bps) – maximum rate is determined by the link speed and duplex.
- Frame size – choose from seven different frame sizes or select sweep to run the test on all seven frame sizes.
- Content – select payload for all 1s, all 0s, alternating 1s and 0s or random.
- Test duration can be 2 seconds to 18 hours.

Test results can be viewed in a tabular or graphical format. The Rate format tabular view indicates the local and remote transmit and receive rates together with the total percentage of frames received by both devices. Switching to tabular Frame Format view shows the number of local and remote frames transmitted and received, together with the total percentage of frames received by both devices.
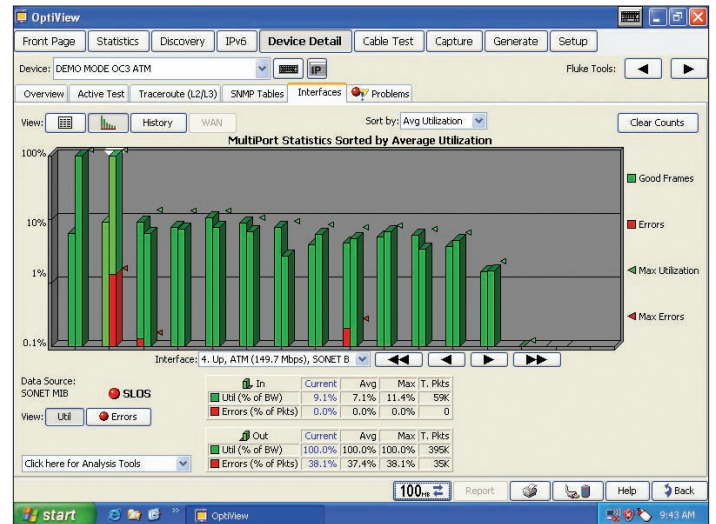
WAN interface statistics
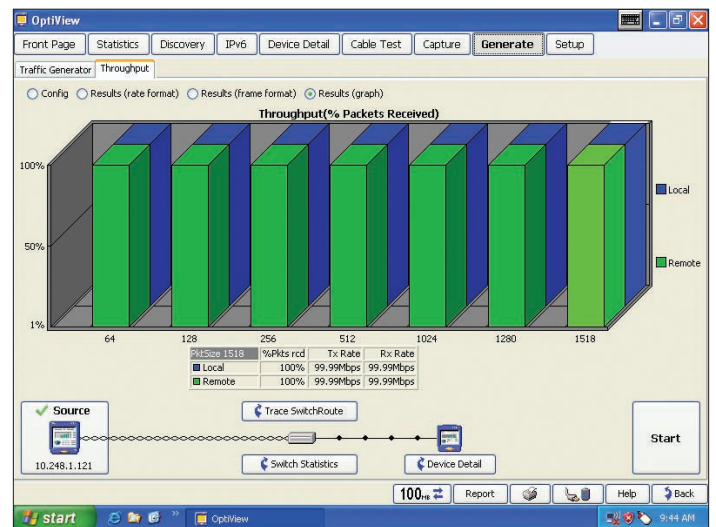
Throughput results

Port based network access control (802.1X)

To speed deployment of IEEE 802.1X, the OptiView Series III is capable of performing a full 802.1x transaction with an authentication server to ensure correct credentials are being deployed. The analyzer supports 802.1X authentication through most common EAP (Extensible Authentication Protocol) types, 15 in total, allows import of software certificates and can store multiple authentication profiles to allow connectivity to different broadcast domains or networks with multiple authentication servers for deployment, validation and troubleshooting. A connection log for detailed 802.1X protocol exchange analysis is also generated.

Remote user interface

Simply point a web browser at the IP address of a correctly configured OptiView Series III Portable Network Analyzer to retrieve saved reports and capture files. You can also install a Remote User Interface (UI) and use your PC to obtain remote access to an analyzer over a TCP/IP connection. Once the Remote UI is installed, simply give the interface the IP address of the analyzer to monitor and see an almost identical interface to the analyzer's local interface. Communications between the analyzer and Remote UI can also be encrypted. A single portable analyzer will support seven remote sessions for collaborative troubleshooting or opening of multiple sessions on a PC to provide a remote dashboard view. Additionally, use the analyzers management port to configure and monitor for out of band management independently of the network under test port.
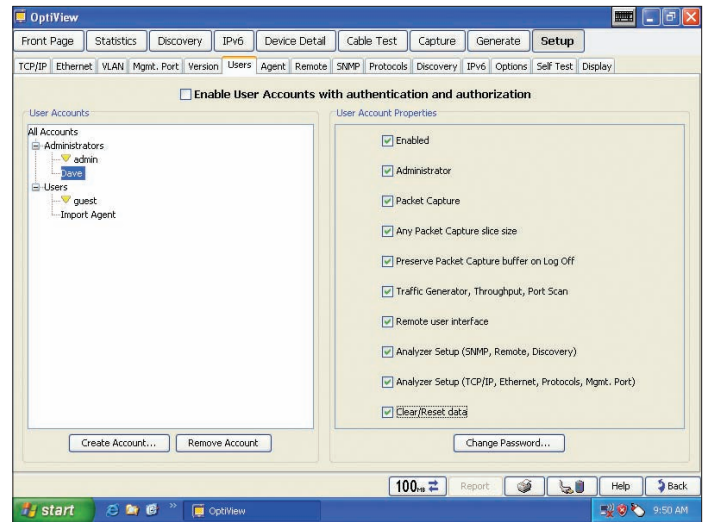
User accounts

User accounts

Through the user accounts screen, you can add and modify analyzer security information for each individual analyzer user, which prevents unauthorized use of certain analyzer features for easier compliance with regulatory requirements. Features that can be disabled include packet capture and decode, traffic generation, remote user interface and analyzer configuration.

Context sensitive help

Help is contextually linked to each screen in the analyzer. While that help screen is displayed, you may select other information from the table of contents, choose an index entry, or perform a full text search on any help topic or term.

Portable Network Analyzer removable hard drive option for classified environments

See what's happening on your classified network by simply connecting one single tool that ensures any sensitive data stored on your network analyzer's hard drive never leaves that environment.

Fluke Networks OptiView Series III Portable Network Analyzer with removable hard disk drive is a new approach to classified environment network analysis that provides you with the Network SuperVision you need for all seven layers, along with the speed and simplicity your organization demands. Network information discovered by the OptiView Series III Portable Network Analyzer can be stored on the removable hard drive which allows the analyzer to be moved from classified environments of different levels and between classified and unclassified systems by simply replacing the hard drive.


Optional removable hard drive

Reporting/documenting made easy

While viewing the statistics, discovery or detail screens, pressing the Reports key will generate HTML reports on Protocols, Top Hosts, Top Conversations, Devices, Networks, Problems and many more. These reports are saved and may be viewed locally or remotely using a web browser. For advanced documentation, add OptiView Reporter and automatically import the OptiView Analyzer data for reporting, trending and event notification. OptiView Reporter's integration with Microsoft Office Visio diagramming program allows you to create network maps showing the links between your servers, switches, routers and hosts.

End-to-end application testing and monitoring with NetAlly® Option

The OptiView Network Analyzer comes with a NetAlly Agent preinstalled, and with the separate NetAlly Application Advisor Test Center software and additional agents, users can test and monitor a variety of network and application performance parameters from and to any point in the network. Typically installed at network aggregation points or remote sites, NetAlly Agents are capable of performing extensive tests selected from a diagnostic library of predefined and automated test procedures. Primary parameters such as delay, loss, throughput and jitter, peer-to-peer and client server applications such as HTTP, Mail and FTP may be analyzed. Troubleshooting tests can be configured with notifications or alerts that are dependent on the results of the test. The test results are displayed using an on-line graphical user interface or published in standardized reports.
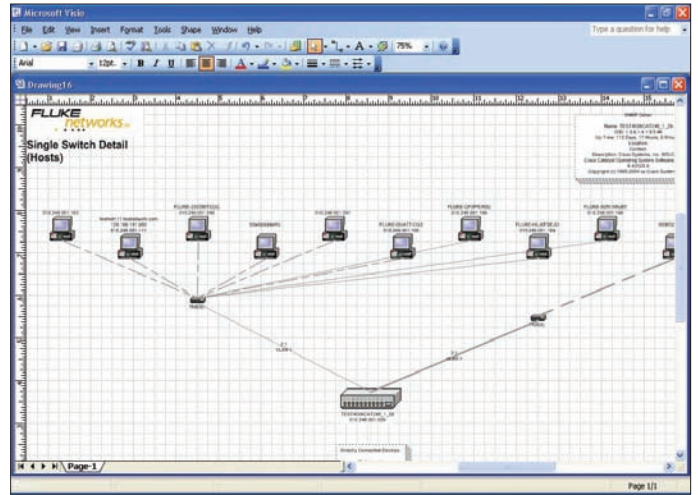
Network mapping via OptiView Reporter and Visio
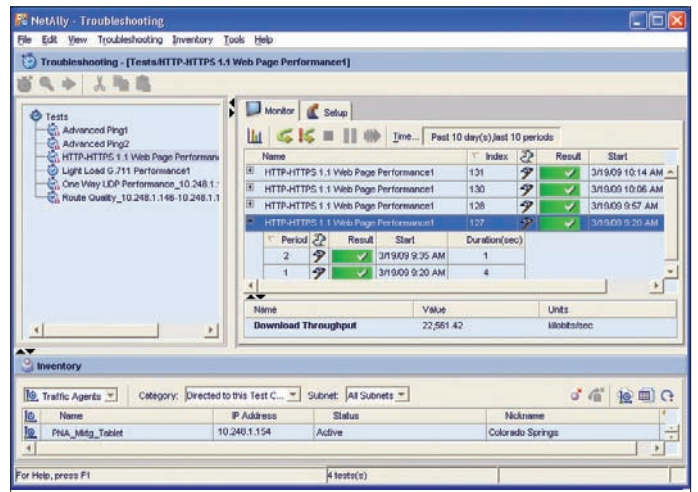
Application testing with NetAlly Application Advisor
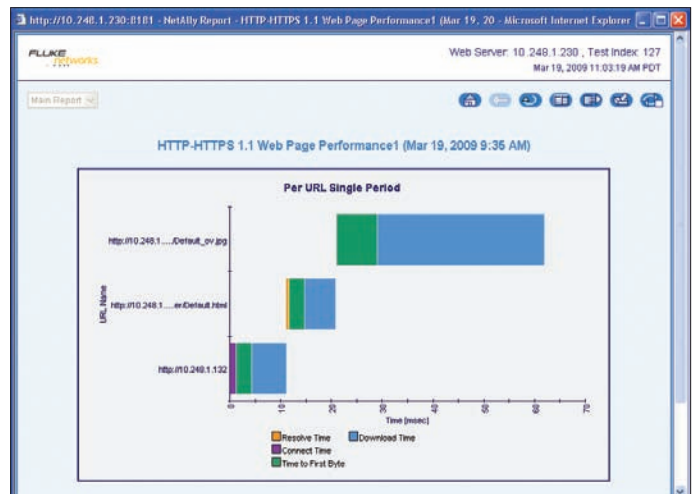
Application testing with NetAlly Application Advisor

AirMagnet WiFi Analyzer Option

Fluke Networks gives you the visibility you need to manage both your 802.11 a/b/g/n wireless and 10/100/1000 Ethernet copper and fiber wired networks. By extending the award-winning OptiView Portable Network Analyzer with Wi-Fi detection, verification and troubleshooting, Fluke Networks again ensures that OptiView is the network visibility tool of choice.

With the WiFi analyzer option, get total visibility into your network. It's a solution that brings value to key wireless network tasks such as:

- Discovery of wireless access points and clients.
- Detection and location of rogue APs.
- Active client based connectivity testing.
- Channel monitoring.
- Packet capture and decode for complete analysis of 802.11 a/b/g/n WLAN's.

In addition, load Fluke Networks' powerful wireless stand-alone software on the analyzer such as AirMagnet Survey Software for site survey analysis to quickly optimize coverage and performance, or AirMagnet Spectrum Analyzer to detect, identify and locate RF emitting devices that interfere with 802.11 and cause intermittent performance problems.

AirMagnet Wi-Fi Analyzer

AnalyzeAir Wi-Fi Spectrum Analyzer

AnalyzeAir Wi-Fi Spectrum Analyzer software runs on the OptiView platform and provides IT network professionals the vision they need into the hidden world of RF, providing them the ability to see the spectrum in a visible and intelligible format. AnalyzeAir lets you see, monitor, analyze, and manage all the RF sources and wireless devices that influence your Wi-Fi network's performance and security, even if those devices are unauthorized or transient. Unlike singlefunction RF analyzers or expensive tools that provide RF information without device identification and location, AnalyzeAir provides an easy-to-understand, fast-start solution allowing users to quickly resolve RF problems that prevent WLAN connectivity and impact performance.

For additional information, see the detailed AnalyzeAir Wi-Fi Spectrum Analyzer datasheet.
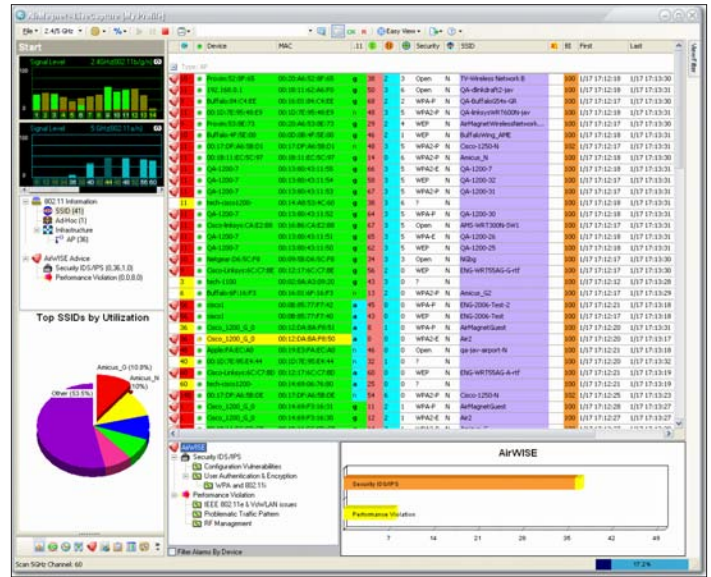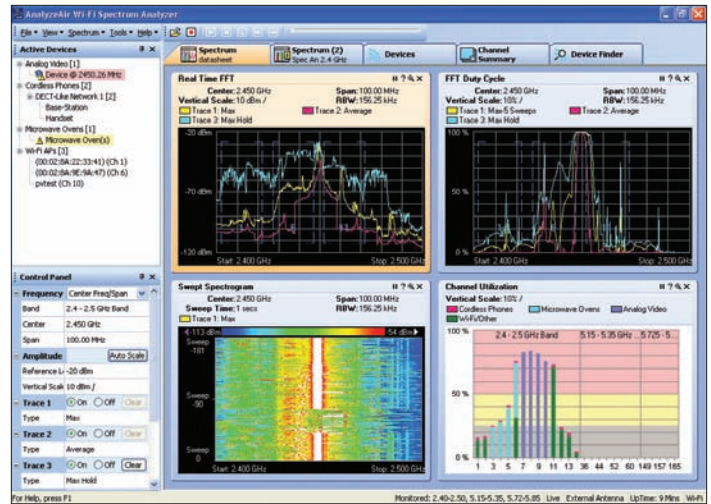
AnalyzeAir Overview

OptiView® IPv6 Analysis Option

The analyzer will discover and display complete IPv6 network and device inventory including routers, switches, wireless AP's, DHCP6 servers and hosts. It enables you to identify active IPv6 devices in the network and those that may have problems in single-stack IPv6 networks. Router Advertisements are analyzed and the analyzer displays information gathered from routers (by subnet) such as the router name, auto configuration, MTU, preferred lifetime, valid lifetime, network name, subnet, local prefix, on link, and user-defined name.

Easily identify applications that may be communicating using both IPv4 and IPv6 protocols. In a dual stack network, IPv4 and IPv6 can be running at the same time but if the network becomes pure IPv6, the application my not continue to run.

Detect devices using tunneling mechanisms and identify the tunnels in use. Undetected or unauthorized tunneling could represent a serious security risk.
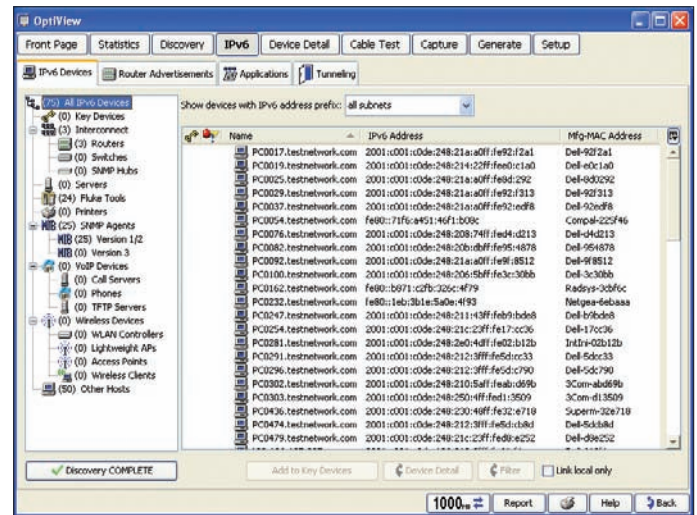
IPv6 Devices

OptiView® Fiber Inspector Option

Dirt, dust and other contaminants are the enemy of high-speed data transmission over optical fiber. With today's network applications requiring more bandwidth and loss budgets being tighter than ever before, it is imperative that all optical connections are clean and free of contaminants to ensure network operation. Fluke Networks' OptiView Series III Portable Network Analyzer, together with the OptiView Fiber Inspector Option, is the solution.

The OptiView Fiber Inspector Option, a portable video microscope that connects to a USB port on an OptiView Series III Portable Network Analyzer, gives you superior vision by enabling you to inspect all types of installed fiber terminations in hardware devices and patch panels. It saves you time by eliminating the need to access the rear of p atch panels or disassemble hardware devices prior to inspection. Instead of removing each individual fiber, you need only insert the video probe to inspect the fiber while it's still in place.

The OptiView Fiber Inspector:
• Easily inspects fiber connectors already installed on patch panels.

• Quickly determines whether fiber connectors on a hardware device are clean and in good condition – without disassembling the device!

• Eliminates the hazards of inspecting live fiber.

• Is compatible with standard ST, SC, and FC connectors, and other connector types including small form factor connectors with optional adapter tips.

• Leverages the investment already made in the OptiView Series III Portable Network Analyzer by eliminating the need for a separate display.

FLUKE networks®

Product Suites - more solutions, more value

The OptiView Management Suites turn the OptiView Series III Network Analyzers into a complete solution of visionary network management products that work with the Portable Network Analyzer to monitor, analyze and troubleshoot, giving you control of every situation and making your daily network management tasks more efficient. You get enterprise-wide vision with the power to drill down seven layers deep.

You can identify problems through the application layer with the application-centric ClearSight Analyzer™. It can analyze capture files from the OptiView analyzer for full seven-layer decodes with expert analysis. Advanced filtering and triggering let you find offending packets. And, OptiView™ Reporter software together with your hardware agents allows trending of user defined ports in your switched network. Or, set it up to collect data from your analyzer. With a single click, you can generate network connection diagrams with our unique link to Microsoft® Office Visio® software. And if a key device, router, or switch port is overloaded, you'll know about it in a heartbeat.

Our Network SuperVision Gold Support

plans give you exclusive services and 24/7 technical assistance. Sign up for our Gold Support plan and you'll enjoy outstanding privileges to protect and add value to your investment in Fluke Networks equipment. They include unlimited technical assistance seven days a week, 24 hours a day via phone or at our web site support center. Repairs on covered items and "next day" dispatched loaner units for uninterrupted service. Free software upgrades. Scheduled annual performance verification service. Web based training. Access to our extensive Knowledge Base library of operation and application related technical articles. And Gold "Members Only" special prices and promotions. Some benefits are not available in all countries.

See **www.flukenetworks.com/goldsupport** for more information.

Specifications

General Specifications	
Weight	Without external battery 2.2 kilograms (5.0 lbs); With external battery 3.0 kilograms (6.6 lbs)
Dimensions	26.0 x 23.4 x 6.4 centimeters (10.3 x 9.2 x 2.5 inches)
Display	LCD touch screen, 800 x 600 pixels, active color panel, CCFT back-light and bezel, touch pad
LED Indicators	16 (21 with external battery)
Power	
Battery	Internal battery Lithium Ion 11.1 V DC (nominal), 2 Ah; External battery Lithium Ion 11.1 V DC (nominal), 6 Ah
AC	External AC adapter/battery charger AC input: 120 V – 240 V, 50/60 Hz, 1.5 A DC output: 15 V, 4.0 A
Ports	
Communication and accessory ports	3 USB, 1 PC Card type II, 1 VGA out 15-pin connector
Network analysis ports	RJ-45 10/100/1000BASE-T Ethernet, fiber 100/1000BASE-X SFP GBIC
Management port	10/100/1000BASE-T (RJ-45) Ethernet
Network Standards	
LAN Interfaces	IEEE 10BASE-T, IEEE 100BASE-TX, IEEE 100BASE-FX, IEEE 1000BASE-X
Standard SNMP MIBs Used	RFCs: 1213, 1231, 1239, 1285, 1493, 1512, 1513, 1643, 1757, 2021, 2108, 2115, 2127, 2495, 2515, 2558
Media	
Cable Types	Unshielded Twisted Pair LAN cables (100 and 120 Ohm UTP category 3, 4, 5, 5E, and 6 ISO/IEC Class C and D); Foil-screened Twisted Pair cables (100 and 120 Ohm ScTP category 3, 4, 5, and 6 ISO/IEC Class C and D)
Cable Length 1	1 to 153 m (3 ft to 500 ft) +/- 2 m (6 ft)
Environmental and Safety	
Operating Temperature	10°C to 30°C (50°F to 86°F) with up to 95% Relative Humidity 10°C to 40°C (50°F to 104°F) with up to 75% Relative Humidity
Non-Operating Temperature	-40°C to +71°C (-40°F to +159.8°F)
Approvals	
Shock and vibration	Meets requirements of MIL-PRF-28800F for Class 3 equipment
Laser	Class 1 Laser Product, complies with 21 CFR 1040.10 & 1040.11, CFR(J), and EN60825-1:1994/A1:1997/A2:2002
Safety	Complies with CAN/CSA-C22.2 NO. 60950-1 Canadian Standards, and UL 60950-1 (U.S. standards) (CE) Complies with EN60950

Models, Options and Accessories

OptiView Portable Analyzer Models	
Model Number/Name	**Description**
OPVS3-GIG	OptiView Series III Portable Network Analyzer Pro Gigabit. All OPVS3 mainframes include: VLAN, ITO, and WAN options
OPVS3-GIG/W	OptiView Series III Portable Network Analyzer Pro Gigabit Includes OPVS3-WFA OptiView AirMagnet WiFi Analysis Option 802.11 a/b/g/n
OPVS3-GIG/S	OptiView Series III Portable Network Analyzer Pro Gigabit with OPVS2-EXPT OptiView Expert Analysis Option, OPVS2-VOIP Voice Over IP and OPVS3-WFA OptiView AirMagnet WiFi Analysis Option 802.11 a/b/g/n
OPVS3-GIG/RHD	OptiView Series III Portable Network Analyzer Pro Gigabit with Removable Hard Drive and OPVS3-IPV6 analysis option
Options	
Model Number/Name	**Description**
OPVS3-IPV6	OptiView IPv6 Analysis Option
OPV-RPTR/PRO	OptiView Reporter Pro (40 Devices)
OPV-RPTR	OptiView Reporter (1 Device)
OPVS3-WFA	OptiView AirMagnet WiFi Analysis Option 802.11 a/b/g/n
OPVS3-WSP	OptiView AirMagnet Survey PRO & Planner Suite (Replaces InterpretAir)
OPVS3-WSPI	OptiView Wireless Suite: includes AirMagnet Survey PRO, AirMagnet Planner Module, and AnalyzeAir Wi-Fi Spectrum Analyzer (Replaces IA-AA)
OPVS3-WL	OptiView WLAN Suite: includes AirMagnet Survey PRO, AirMagnet Planner Module, AnalyzeAir Wi-Fi Spectrum Analyzer, and OptiView 802.11 a/b/g/n Wireless Network Analysis Option (Replaces OPVS3-WLESS)
Accessories	
Model Number/Name	**Description**
OPVS2-BP	External Battery Pack
OPVS2-KB	Mini USB keyboard
OPV-FT600	OptiView Fiber Inspector
OPV-HCASE	Hard Carrying Case for all OptiView Integrated Network Analyzer Models
OPVS3-RHD	Removable Hard Drive for OPVS3-GIG/RHD
OPVS3-RHD/4	Pack of four Removable Hard Drives for OPVS3-GIG/RHD
LRPRO-REFLCT	LinkRunner™ Pro Reflector
OPV-SFP-SX	850 nm, 50 and 62.5 micron multi mode fiber 1000BASE-SX SFP adapter for OptiView Series III Portable Network Analyzer
OPV-SFP-LX	1300 nm, 10 micron single mode fiber 1000BASE-LX SFP adapter for OptiView Series III Portable Network Analyzer
OPV-SFP-ZX	1510 nm fiber 1000BASE-ZX SFP adapter for OptiView Series III Portable Network Analyzer
OPV-SFP-100FX	100BASE-FX SFP adapter
NFC-Kit-Case	Fiber Optic Cleaning Kit
Support	
Model Number/Name	**Description**
GLD-OPVS3	Gold Support Services, OptiView Series 3
GLD-AM-WFA	Gold Support Services, 1 year software support for AirMagnet WiFi Analyzer on OptiView Portable Analyzer
GLD-AM-WSP	Gold Support Services 1 yr OPV AM Survey PRO & Planner Suite (Replaces GLD-InterpretAir)

Models, Options and Accessories (cont.)

OptiView Management Suites: Analysis and Troubleshooting	
Model Number/Name	**Description**
OPVS3-GIG/OMS/AT-ADV	Advanced Portable Analysis and Troubleshooting Suite: A portable network analysis and troubleshooting bundle for wired Ethernet. It includes OPVS3-GIG - OptiView Series III Portable Network Analyzer, OPV-RPTR/PRO - OptiView Reporter Pro monitoring software for 32 devices, OPVS3-WLIA - OptiView Wireless Infrastructure Analysis Option, NetAlly Agent and Application Troubleshooting Expert Active Tests
OPVS3-GIG/OMS/AT-PRO	Professional Analysis and Troubleshooting Suite: A portable network analysis and troubleshooting bundle for wired and wireless Ethernet. It includes OPVS3-GIG - OptiView Series III Portable Network Analyzer, OPV-RPTR/PRO - OptiView Reporter Pro monitoring software for 32 devices, OPVS3-WLIA - OptiView Wireless Infrastructure Analysis Option, NetAlly Agent, Application Troubleshooting Expert Active Tests, OPVS3-WFA - OptiView AirMagnet WiFi Analyzer and ANALYZEAIR - WiFi Spectrum Analyzer
OPVS3-GIG/OMS/AT-EXPT	Expert Portable Analysis and Troubleshooting Suite: A portable network analysis and troubleshooting bundle for wired and wireless Ethernet and "on the wire" application protocol analysis. It includes OPVS3-GIG - OptiView Series III Portable Network Analyzer, OPV-RPTR/PRO - OptiView Reporter Pro monitoring software for 32 devices, OPVS3-WLIA - OptiView Wireless Infrastructure Analysis Option, NetAlly Agent, Application Troubleshooting Expert Active Tests, OPVS3-WFA - OptiView AirMagnet WiFi Analyzer, ANALYZEAIR - WiFi Spectrum Analyzer, CSN/CSA-100 - ClearSight Analyzer Software and CSN/OPT-3045 - IP Multicast/History Reporter/Packet Generator Option for ClearSight Analyzer
OptiView Management Suites: Monitoring, Analysis and Troubleshooting	
Model Number/Name	**Description**
OPVS3-GIG/OMS/MS-ADV	Advanced OMS Suite: An essential suite for network and application monitoring, analysis and troubleshooting. It includes OPVS3-GIG - OptiView Series III Portable Network Analyzer, OPVS3-WGA/GIG/SP - OptiView Management Appliance , OPV-RP-TR/PRO - OptiView Reporter Pro monitoring software for 32 devices, OPVS3-WLIA - OptiView Wireless Infrastructure Analysis Option, NetAlly Agent and Application Troubleshooting Expert Active Tests
OPVS3-GIG/OMS/MS-PRO	Professional OMS Suite: An essential suite for network and application monitoring, analysis and troubleshooting plus end user experience monitoring and analysis. It includes OPVS3-GIG - OptiView Series III Portable Network Analyzer, OPVS3-WGA/GIG/SP - OptiView Management Appliance , OPV-RPTR/PRO - OptiView Reporter Pro monitoring software for 32 devices, OPVS3-WLIA - OptiView Wireless Infrastructure Analysis Option, Application Troubleshooting Expert Active Tests, OPVS3-WFA - OptiView AirMagnet WiFi Analyzer and ANALYZEAIR - WiFi Spectrum Analyzer and APPAD-TC-10 - NetAlly Application Advisor Test Center with 10 Agents
OPVS3-GIG/OMS/MS-EXPT	Expert OMS Suite: The complete suite for network and application monitoring, analysis and troubleshooting. It includes OPVS3-GIG - OptiView Series III Portable Network Analyzer, three OPVS3-WGA/GIG/SP - OptiView Management Appliance (3 appliances), OPV-RPTR/PRO - OptiView Reporter Pro monitoring software for 32 devices, OPVS3-WLIA - OptiView Wireless Infrastructure Analysis Option, Application Troubleshooting Expert Active Tests, OPVS3-WFA - OptiView AirMagnet WiFi Analyzer, ANALYZEAIR - WiFi Spectrum Analyzer, CSN/CSA-100 - Clearsight Analyzer Software and CSN/OPT-3045 - IP Multicast/History Reporter/Packet Generator Option for ClearSight Analyzer, APPAD-TC-10 - NetAlly Application Advisor Test Center with 10 Agents and OPV-TRKR-10 - OptiView NetFlow Tracker (10 Device)
Support	
Model Number	**Description**
GLD-OPVS3-GIG/OMS/AT-ADV	Gold Support Services, Advanced Portable Analysis and Troubleshooting Suite
GLD-OPVS3-GIG/OMS/AT-PRO	Gold Support Services, Professional Portable Analysis and Troubleshooting Suite
GLD-OPVS3-GIG/OMS/AT-EXPT	Gold Support Services, Expert Portable Analysis and Troubleshooting Suite
GLD-OPVS3-GIG/OMS/MS-ADV	Gold Product Support Services, Advanced OMS Suite
GLD-OPVS3-GIG/OMS/MS-PRO	Gold Product Support Services, Professional OMS Suite
GLD-OPVS3-GIG/OMS/MS-EXPT	Gold Product Support Services, Expert OMS Suite
ClearSight Analyzer	
Model Number	**Description**
CSN/CSA-1000	ClearSight Analyzer Software
CSN/CSA-1000CD	ClearSight Analyzer Software on CD
CSN/CSA-1045	W/IP Multicast/History Rptr/Packet Gen
CSN/CSA-1045CD	CSN/CSA-1045CD,CSA W/IP Multicast/History Rptr/Packet Gen-CD
GLD-SW-1000	Gold Product Support Services, 1 Year software maintenance for CSA-1000
GLD-SW-1045	Gold Product Support Services, 1 Year software maintenance for CSA 1045