OptiView XG Network Analysis Tablet - Key Use Case: Overview

OptiView XG enables Wi-Fi and wired network infrastructure troubleshooting by local technicians and engineers, giving them the portability to go anywhere – and the visibility they need – to solve problems down to the desktop. With automated discovery, mapping of the local network and multiple functions to isolate the root cause of infrastructure-related problems, OptiView XG helps distribute problem solving throughout your organization, making everyone more effective.

Core capabilities

- **Wireless Analysis** – Integrated tools for deploying, troubleshooting, and securing 802.11a/b/g/n/ac WLANs
- **Network Infrastructure Analysis** – Automated discovery, mapping, analysis and guided troubleshooting of your network infrastructure
- **Traffic and Packet Analysis** – The ONLY tablet with 10 Gbps "On the wire" analysis
- **Performance Testing** – Troubleshoot problems from end-to-end, conduct network assessments, validate new infrastructure and devices, and test service provider SLAs and QoS at up to a full line-rate of 10 Gbps

*For Overview and General Information about the OptiView XG, see **key use cases***

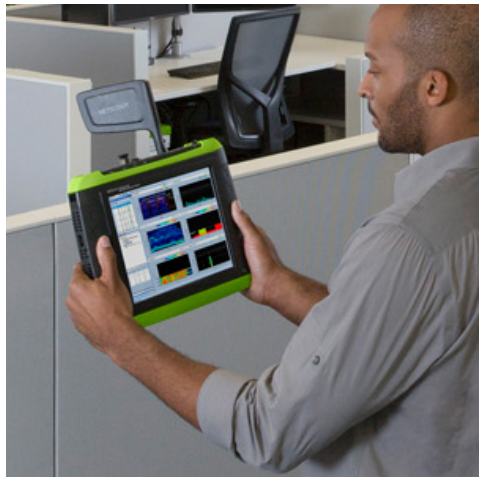
The wireless companion to nGeniusONE for full WLAN lifecycle management and troubleshooting network infrastructures

OptiView XG combines multiple functions and technologies in a unique tablet form factor providing engineers the mobility needed to connect, analyze and troubleshoot anywhere in the network – from the access layer to the data center and remote sites. Headquarters or data center engineers can access the analyzer remotely for collaborative troubleshooting or for direct analysis of the problem area when there is no on-site IT staff or instrumentation. Field engineers appreciate OptiView XG as their “one tool” – ideal for traveling to and troubleshooting remote locations.

- Used with nGeniusONE, OptiView XG provides infrastructure diagnostics from the access layer to WAN to data center
- Integrates the latest wired and wireless technologies with powerful dedicated hardware in a unique tablet form factor to connect, analyze and solve network and infrastructure problems anywhere
- Displays your network exactly the way you want to see it through intuitive, customizable dashboards and interactive maps
- Provides performance testing, 'on-the-wire' and 'in-the-air' automated analysis up to 10 Gbps
- Enables proactive analysis by analyzing the information you need before issues arise, monitoring for problems, and notifying you immediately
- Out-of-the-box and customizable reports and maps

Wireless Analysis

For further information, ***see detailed key use case***



- Full support for the entire WLAN lifecycle – plan, deploy, troubleshoot, and secure 802.11a/b/g/n/ac WLANs
- Enables analysis of 802.11a/b/g/n/ac WLAN environments using the award-winning AirMagnet Wi-Fi Analyzer, Spectrum XT, Survey and Planning tools, and AirMagnet Spectrum ES™ for in-building cellular deployments
- Find rogue clients and access points that could be jeopardizing the security of your network
- Identify and find sources of RF interference that impact the performance of your WLAN
- Quickly troubleshoot WLAN performance issues – configuration problems, co-channel interference, slow clients
- Discovery and querying of wireless LAN controllers provides information about wireless networks across your site
- Automatically create detailed maps of your wired and wireless infrastructure, including APs, WLCs, and wireless clients

Network Infrastructure Analysis

For further information, ***see detailed key use case***

- Real-time discovery engine finds and tracks up to 30,000 devices – hosts, phones, switches, routers, access points, servers and more
- Unique Path Analysis provides graphical view of the path between a user and network resources (local, remote, or cloud-based) and visually indicates health data or problems on critical links and devices along the path
- Automated wired and wireless network mapping – using OptiView's powerful discovery engine, users can interact with their network in a flexible map-based user interface to visually identify configuration and topology issues, speeding troubleshooting. One click sends the map data through a Visio file generator, creating instant, professional network documentation
- Allows visibility of intermittent problems by collecting and monitoring granular data rather than the aggregated data collected by typical network management systems
- Automatically detects problems in the network and suggests resolution procedures
- Measure performance of your VMware® environment, including hypervisor availability, interface utilization, and resource usage levels

Traffic and Packet Analysis

For further information, ***see detailed key use case***

- Ensures line-rate packet capture up to 10 Gbps with zero loss for troubleshooting difficult application problems
- Sequential store to disk allows for multiple, sequential captures to be stored to the OptiView XG analyzer's internal disk or to an external storage device to capture for longer periods or to capture multiple trigger events, ensuring that you capture all the packets needed for successful analysis
- Provides easy-to-understand graphical view of captured traffic (rather than decodes) with powerful drill-down capability, speeding root-cause analysis
- Real-time traffic analysis on SPAN or TAP traffic shows top hosts, top conversations, top protocols – for a fast view of who is using your bandwidth
- Go directly in-line (up to 1 Gbps) to observe traffic in real-time or capture at line rate without the need of an external tap, saving time and hassle

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Performance Testing

For further information, ***see detailed key use case***

- Troubleshoot network bottlenecks, validate new architectures, and assess networks for new technology or application deployments, test service providers SLAs and end-to-end QoS
- Measures end-to-end network performance in terms of bandwidth, latency, jitter, loss, test QoS, and availability up to 10 Gbps
- Testing at operational speeds (less than line-rate) in conjunction with Path Analysis reveals network bottlenecks for fast troubleshooting
- Class-of-Service testing and multiple test streams (up to 8 simultaneous) ensures availability and performance of QoS throughout your network, and whether carrier links are supporting QoS

Innovative Design and Powerful Custom Hardware Speeds the Job of Network Engineers

Tablet Form Factor

OptiView XG provides a wide range of functionality to adapt to the dynamic and diverse networks of today, in a convenient tablet for use anywhere in the network. It is the only tool that provides the capabilities to analyze and troubleshoot the performance of wired networks (1 GbE, 10 GbE) and wireless networks (802.11a/b/g/n/ac) from the perspective of either remote or local users. The unique tablet form factor designed specifically for network engineers provides valuable mobility to troubleshoot anywhere in the network, from the engineer's desk, the data center or at the end-user location.

Key Features

Portable - The XG is highly portable. It is 14 inches (36 cm) measured diagonally. At just under 6 pounds (2.5 kg) and 2 inches (5 cm) thin, the XG can be used anywhere.

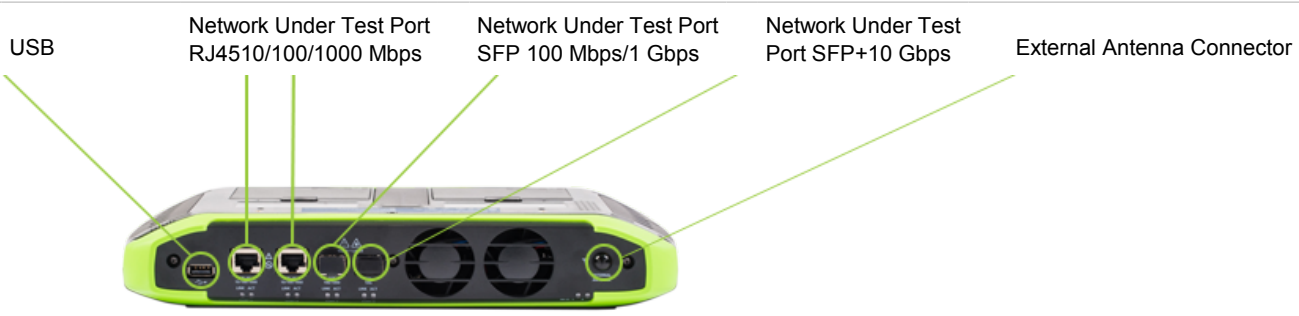
Multiple wireless adapters - The XG has two Wi-Fi adapters and one spectrum adapter built-in. The multiple adapters along with the portability make WLAN analysis and troubleshooting easy as you do not need to swap adapters or have extra external hardware.

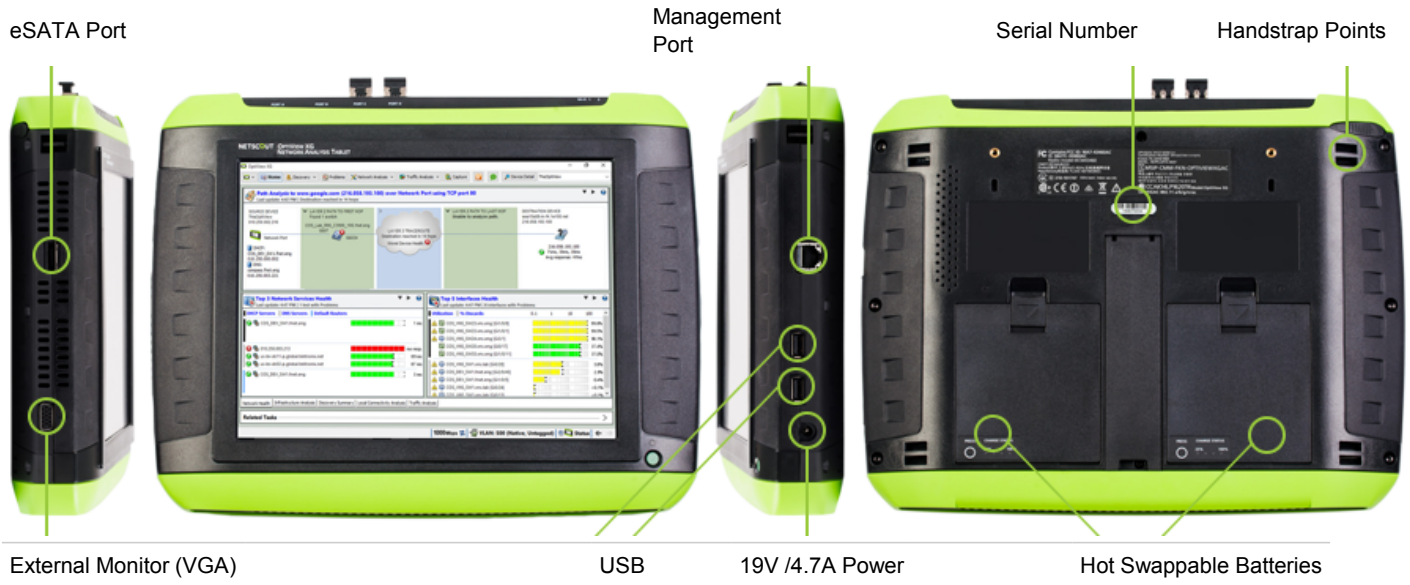
High-resolution display - A large, 10.25 inch high-resolution 1024x728 LCD display is remarkably crisp and vivid making it perfect for viewing and analyzing large amounts of data at once.

Extendable 2 hours of battery life - The XG can be used for up to 4 hours on the battery for wired or wireless analysis (or 2 hours for wired AND wireless analysis). The batteries are hot swappable which means the XG can be used for a much longer time without losing data.

Connectivity - The XG supports 10 Gbps and 1 Gbps fiber, 10/100M and 1 Gbps dual-port copper and 802.11a/b/g/n/ac WLAN.

Performance - The XG runs Windows® 10 Enterprise IoT LTSB (64 bit) with 4 GB of RAM. It has a 240 GB solid state removable drive. The XG obtains its processing power from an Intel® Core™ Duo 1.2 GHz processor. The XG is capable of 10 Gbps full line-rate capture and has a 4 GB dedicated capture buffer.





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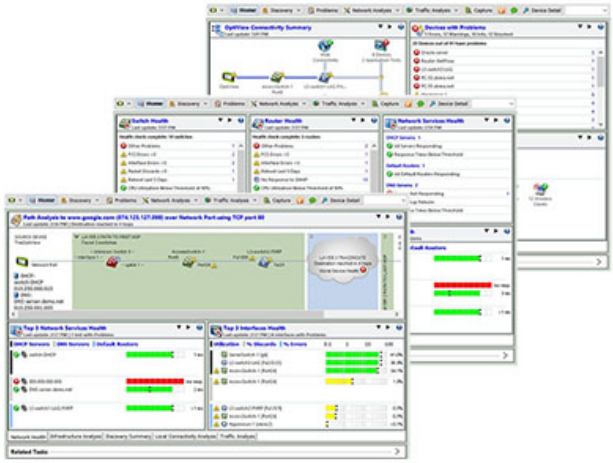
Intuitive User Interface with Customizable Dashboards, Smart Navigation and Easy Reporting

User Configurable Dashboards

Present the relevant data to the right audience. OptiView XG has extensively customizable dashboards that transform collected information into actionable data. The dashboard can be customized for a particular user or site. Save and export them to different members of your team. The dashboard provides an at-a-glance overview of the current status of your network with critical metrics from key paths, routers, switches, servers, access points, and other infrastructure devices. Even remote users can set up dashboards to get their own view of network operations.

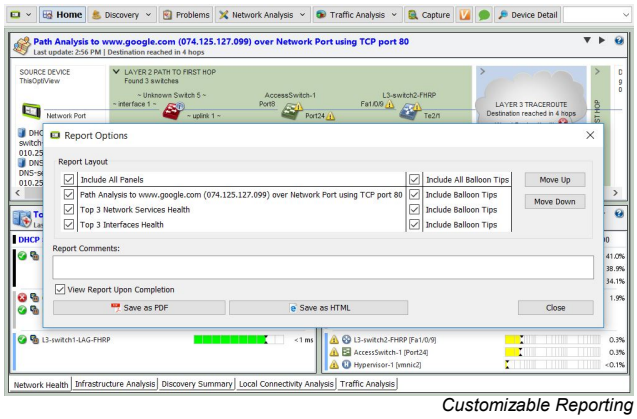


Customizable Dashboards

Network Issue Reporting Engine

OptiView XG offers a number of built-in reports, making it quick and easy to report on network infrastructure problems. While viewing a screen, press the Reports key to generate HTML or PDF reports on protocols, top hosts, top conversations, devices, networks, problems and many more.

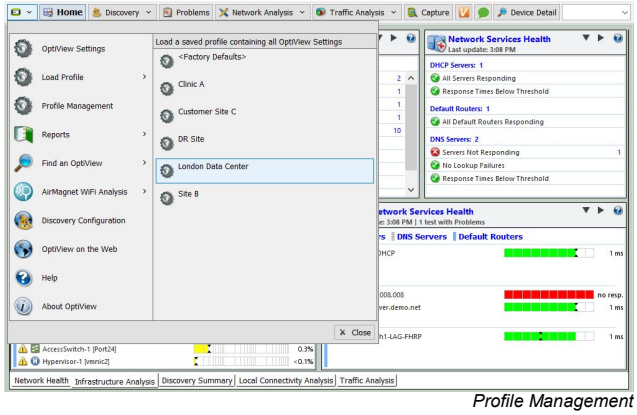
Customize out-of-the-box reports and create completely customized reports using the configurable dashboards in just a few clicks. The ability to choose what data to populate in a report enables users to quickly see the information needed. You can even create reports for specific user profiles, making it easy to generate reports for specific departments or recipients.



Customizable Reporting

Configuration Profile Management

Profile management enables saving instrument settings as a site- or client-specific profile, speeding instrument reconfiguration when moving between different networks. Configure XG as needed for a particular site or network, and save that profile on the instrument or export it for use on another XG. When connecting to a different network, simply load the required profile and XG is instantly configured and immediately begins analysis. Ideal for system integrators, field engineers, consultants or auditors, saving time and ensuring consistency of data between different sessions.



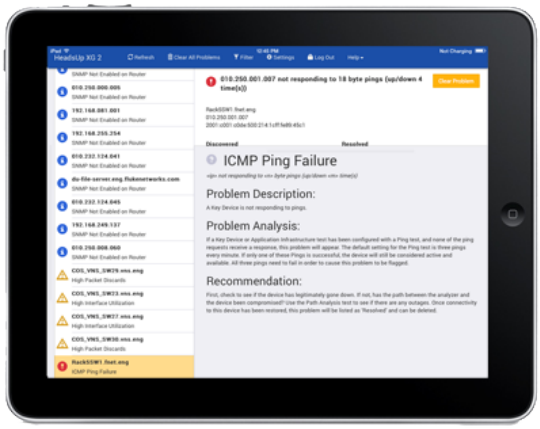
Profile Management

Problem Alerting and Notification – SNMP Trap and Syslog Messages

OptiView XG scans the entire network infrastructure, identifying issues and bringing them to your attention. When problems are discovered, XG utilizes the on-board Windows Event Log, SNMP service and syslog agent to send problem notifications to the user's network management system (via SNMP Traps or syslog messages), where they can be routed to the appropriate technician.

Problem Alerting and Notification – HeadsUp™ XG Mobile App

With the HeadsUp XG mobile app for Apple iOS (available free via the Apple iStore), and Android devices (available on Google Play), you get real-time notifications from your OptiView XG tablet(s). Instant notification means you're always "in touch" with your network, and see critical problems even before users start calling the help desk!



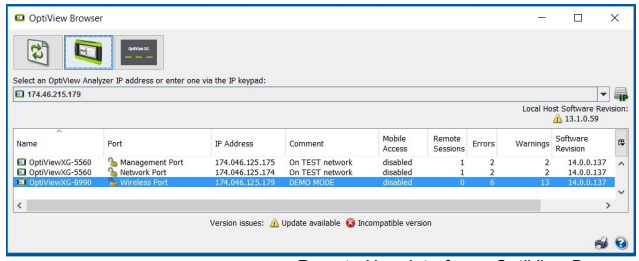
HeadsUp XG app for iOS

Use HeadsUp XG to browse your OptiView XG units, and drill down into problems on the Problem Log. The affected devices and specific problems are reported, along with the severity of the problem (Error, Warning, Info) and time detected. Problems that have been resolved are also indicated, and the time the resolution was detected. The app also includes a detailed Help file, or onboard "expert", providing background information about the type of problem, how it can be caused and what can be done to resolve it. Having visibility in the palm of your hand allows you to react more quickly when problems occur. You decide whether the particular problem is a "red alert" or something that can wait, helping you manage your time more effectively. Multiple users can use HeadsUp XG to access and get notifications from your XG(s).

You can "clear" problems on the XG remotely from your phone or tablet, and through the app's synchronization capability, the problems are cleared on the XG simultaneously, and vice versa – problems cleared on the XG are automatically cleared on your handheld device.

Remote User Interface and Access

Simply point a web browser at the IP address of a correctly configured OptiView XG tablet to retrieve saved reports and capture files. You can also install a remote User Interface (UI) and use your PC to remotely access an OptiView XG over a TCP connection. Once the remote UI is installed, simply give the interface the IP address of the OptiView XG and see the default dashboards. You can then create your own remote dashboards to give you a personalized view of the network.

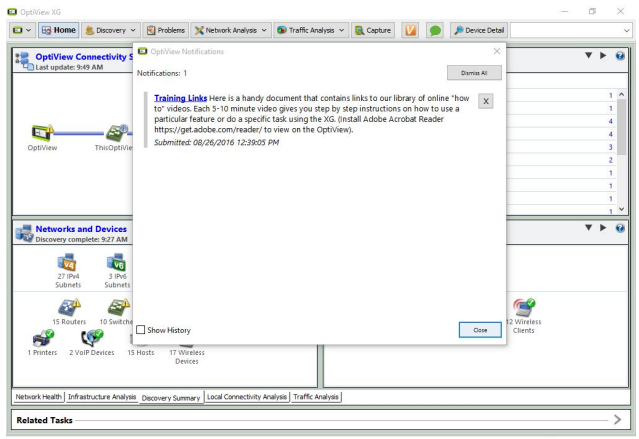


Remote User Interface - OptiView Browser

Communication between the OptiView XG and remote UI can be encrypted. A single portable OptiView XG supports up to thirty-two remote sessions for collaborative troubleshooting or opening of multiple sessions on a PC to provide a remote "NOC" view. The OptiView XG features a separate management port for "out-of-band management" independent of the network under test port. When using the remote interface, all dashboards created are stored on the user's PC, allowing further customization for each remote user.

Notification Center

OptiView XG users can now receive product related information and communications directly from the OptiView XG through the new notification center. Use the notification center to stay abreast of the latest releases, available training, whitepapers, etc. to get the most out of the product.



User Accounts

Add and modify security information for each individual OptiView XG user to prevent unauthorized use of certain features for compliance with regulatory requirements or internal policies. For example, this allows users access to powerful troubleshooting features such as SNMP, while keeping the community strings hidden. Features that can be disabled include packet capture and decode, traffic generation, remote user interface and OptiView XG configuration.

Context Sensitive Help

Help is contextually linked to each screen in the OptiView XG. While the 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.

Removable Hard Drive

Essential for use on classified networks and secure environments, this feature ensures any sensitive data stored on your network analyzer's hard drive never leaves that facility. Network information discovered by the OptiView XG tablet is stored on the removable hard drive, allowing the OptiView XG to be moved between classified environments and between classified and unclassified systems by simply removing and replacing the hard drive. Extra, pre-configured drives are available (spare drives are pre-configured with Windows 10 OS and OptiView operating software).

Included with OptiView XG Network Analysis Tablet:	
	• Leather carrying case with extra storage • Shoulder and hand straps • AC adapter/charger • Stylus • Getting Started Guide • USB memory stick • 2 m (6') shielded twisted-pair patch cord • Internal removable hard drive *The OptiView XG tablet with wireless (WL, PRO, PLUS and EXPT models) ship with one external, directional wireless antenna with mounting hardware and one omnidirectional antenna (not shown).*

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General Specifications

Physical Specifications	
Dimensions	(H,W,D) 9.45" x 12.43" x 2.03" (240 mm x 315.7 mm x 51.6 mm)
Weight	5.6 lb. (2.5 kg) with batteries; 4.5 lb. (1.8 kg) without batteries
Display	Color active matrix TFT LCD, 1024 x 768 pixels, LED backlight, touch panel with 2 touch points
Security	Kensington® security slots (2) on rear panel for connection of security cable
Environmental Specifications	
Operating Temperature*	10°C to 30°C (50°F to 86°F) with up to 95% Relative Humidity. 0°C to 50°C (32°F to 122°F) with up to 75% Relative Humidity
Storage Temperature	-40°F to +160°F (-40°C to +71°C)
Shock and Vibration	Meets requirements of MIL-PRF-28800F for Class 3 equipment
Safety	EN 61010-1 2nd Edition
Altitude**	4600 m (15000 ft) on batteries
Electrical Specifications	
AC Adapter Input	100 V – 240 V, 50/60 Hz, 1.5 A
AC Adapter Output	19 VDC, 4.74 A, 90 W
Battery*	Two user-replaceable, rechargeable, 45 Watt-hour, lithium-ion battery packs.
Battery Operating Time	2 hr. (typical - can be extended to approximately four hours by disabling/powering down the network under test ports for doing extended WLAN analysis)
Battery Charge Time*	3 hr. (typical). Charge time depends on residual battery charge
System Specifications	
Operating System	Windows 10 Enterprise IoT LTSB, 64 Bit
PC - Processor	Intel® Core™ Duo CPU U9300 @ 1.2 GHz
PC - RAM	4 GB
Capture Buffer	4 GB

** Battery charging is disabled when internal temperature rises above 113°F (45°C).*
*** Altitude specification applies to OptiView XG and batteries. Maximum altitude for AC adapter is 2000 m (6,600 ft.).*

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Wired Network Connection Specifications

Ports	
Network Analysis Ports	2 RJ-45 10/100/1000BASE-T Ethernet, Small form-factor pluggable (SFP) 100/1000BASE-X Ethernet, enhanced small form-factor pluggable (SFP+) 10GBASE-X Ethernet
Management Port	RJ-45 10/100/1000BASE-T Ethernet
Supported SFP Modules	1000BASE-SX - 850 nm (Standard)
	100BASE-FX - 1300 nm
	1000BASE-LX - 1310 nm
	1000BASE-ZX - 1550 nm
Supported SFP+ Modules	10GBASE-SR - 850 nm (Standard)
	10GBASE-LR - 1310 nm
	10GBASE-LRM - 1310 nm
Fault Tolerance	RJ-45 Ports are designed to withstand a maximum of 100 volts
USB Ports	Three USB 2.0 ports
eSATA Port	eSATA port (non-powered) for connecting external hard drive
Video Port	Standard VGA port for connection to monitor or projector
Cables	
Cable Types	100 Ohm UTP and ScTP category 5, 5E, 6, ISO/IEC Class C, D, E
Cable Length Measurement	Measurable cable lengths are from 3 feet (0.9 meters) to 500 feet (152 meters)
	Accuracy: ± 6 feet (± 2 meters)
	Length measurement is based on Nominal Velocity of Propagation (NVP) for selected cable type

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Wireless Network Connection Specifications

Wireless Antennas	
Internal Wireless Antennas	Seven internal 2.4 GHz, 1.1 dBi peak, 5 GHz, 3x3 array
	3.2 dBi peak antennas
External Omni-directional Antenna	Antenna, WLAN, omnidirectional, 2.4 & 5 GHz
	802.11 a/b/g, 50 Ω. Gain: 2.1 dBi (2.45 GHz)
	2.4 dBi (4.9 GHz), 2.6 dBi (5.25 GHz), 2.5 dBi (5.875 GHz)
External Directional Antenna	Antenna, frequency range 2.4 - 2.5 and 4.9 - 5.9 GHz
	Minimum gain 5.0 dBi peak in the 2.4 GHz band, and 7.0 dBi peak in the 5 GHz band
External Antenna Connector	Reverse SMA

Wi-Fi Adapters	
Data Rate	802.11a: 6/9/12/24/36/48/54 Mbps
	802.11b: 1/2/5.5/11 Mbps
	802.11g: 6/9/12/24/36/48/54 Mbps
	802.11n (20 MHz): MCS0-23, up to 216 Mbps
	802.11n (40 MHz): MCS0-23, up to 450 Mbps
	802.11ac (80 MHz): MCS0NSS1-MCS9NSS3, MAX PHY rate 1.3 Gbps Operational throughput rate: up to ~400Mbps
Operating Frequency	2.412 – 2.484 GHz
	5.170 – 5.825 GHz
Security	64/128-Bit WEP Key, WPA, WPA2, 802.1X
Transmit Output Power (Tolerance: ±2 dBm))	802.11a: 16 dBm @ 54 Mbps
	802.11b: 20 dBm @ 11 Mbps
	802.11g: 17 dBm @ 54 Mbps
	802.11gn HT20: 17 dBm @ MCS23
	802.11gn HT40: 16 dBm @ MCS23
	802.11an HT20: 15 dBm @ MCS23
	802.11an HT40: 15 dBm @ MCS23
	802.11ac VHT20: 13 dBm @ MCS8NSS3
	802.11ac VHT40: 13 dBm @ MCS9NSS3
	802.11ac VHT80: 11 dBm @ MCS9NSS3
Receive Sensitivity (Tolerance: ±2 dBm)	802.11b : -88dBm@11Mbps
	802.11g : -74 dBm @ 54 Mbps
	802.11gn : -69 dBm @ HT20, MCS23
	802.11gn : -67 dBm @ HT40, MCS23
	802.11a : -73 dBm @ 54 Mbps
	802.11an : -68 dBm @ HT20, MCS23
	802.11an : -66 dBm @ HT40, MCS23
	802.11ac : -64 dBm @ VHT20, MCS8NSS3
	802.11ac : -63 dBm @ VHT40, MCS9NSS3
	802.11ac : -60 dBm @ VHT80, MCS9NSS30

Standards and Compliance Specifications

Supported Network Standards	
IEEE 10BASE-TX, IEEE 100BASE-TX, IEEE 1000BASE-TX, IEEE 1000BASE-X, IEEE 10GBASE-X	**RFCs:** 1213, 1239, 1285, 1512, 1513, 1643, 2108, 2115, 2127, 2515, 2819, 3592, 3895, 3896, 4188, 4502
Compliance Statements	
EMC	Complies with IEC/EN61326-1:2006, class A
Safety	Complies with IEC/EN 61010-1:2001, CAN/CSA C22.2 No. 61010-1-04, ANSI/UL 61010-1:2004, EN/IEC 60825-1:2007, EN/IEC 60825-2:2004+ A1:2007
Telephone*	The OptiView XG is NOT designed for connection to a telephone network
	The OptiView XG is NOT designed for connection to an ISDN line

**Note: Do not connect to a telephone network or ISDN line except through a regulatory agency compliant computer network modem device.*

Models*

Product Noun	Description
OPVXG	**OptiView XG – Network Analysis Tablet, 1 Gbps
OPVXG-LAN	OptiView XG – Network Analysis Tablet, 1 Gbps, wired only
OPVXG-10G	**OptiView XG – Network Analysis Tablet, 10 Gbps
OPVXG-LAN-10G	OptiView XG – Network Analysis Tablet, 10 Gbps, wired only
OPVXG-PRO	**OptiView XG – Network Analysis Tablet, 1 Gbps with AirMagnet WiFi Analyzer and Spectrum XT
OPVXG-PROPLUS	**OptiView XG – Network Analysis Table, 1 Gbps with All WLAN Options
OPVXG-EXPT	**OptiView XG – Network Analysis Tablet, 10 Gbps with AirMagnet WiFi Analyzer and Spectrum XT
OPVXG-EXPTPLUS	**OptiView XG – Network Analysis Tablet, 10Gbps with All WLAN Options

Additional models, bundles, accessories and options are available. Go to **enterprise.netscout.com/xg for details*

***For sale only in countries where the XG wireless is certified.*

NETSCOUT MasterCare Support

Our support plans give you exclusive services and 24/7 technical assistance. Sign up for MasterCare Support and enjoy outstanding privileges to protect and add value to your investment in NETSCOUT equipment. They include unlimited technical assistance seven days a week, 24 hours a day via phone or at our web support center. Repairs on covered items and "next day" dispatched loaner units (where available) for uninterrupted service. Free software upgrades. Web-based training. Access to our extensive Knowledge Base library of operation and application related technical articles. Some benefits are not available in all countries.

See **enterprise.netscout.com/gold** for more information.

For more information about OptiView XG, visit **enterprise.netscout.com/xg**

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