

EtherScope® nXG

Portable Network Expert



**Now with
Wi-Fi 6/6E!**

Multi-technology, all-in-one handheld network analyzer

- Native Wi-Fi 6, 2.4/5/6GHz band, and Spectrum Analysis* support
- Quickly test, verify, troubleshoot, and map Wi-Fi and wired networks
- Faster and easier Wi-Fi and Bluetooth/BLE site surveys with AirMapper™
- LANBERT™ Media Qualification app tests the capability of premise cabling and media components for carrying Multi-Gig and 10Gig Ethernet
- Full line-rate Multi-Gig to 10G performance testing & packet capture

Overview

Deploying and maintaining Wi-Fi and wired network infrastructure without the right tools can be daunting... and costly. The EtherScope nXG enables engineers and technicians to get more done faster, from deployment to maintenance and documentation of their ever-changing Wi-Fi and Ethernet access networks.

With its simple operation, yet in-depth visibility, and the ability to remotely access and control EtherScope nXG, engineers can now fully enable and collaborate with “local hands” of field technicians at remote sites to expedite problem solving.



Key Features

- Install, test, verify, and troubleshoot technology upgrades, NBASE-T, 10G, and Wi-Fi networks with advanced testing and purpose-built hardware
- Verify up to 10G Ethernet link performance for critical servers, uplinks and key end devices, plus validate Wi-Fi network performance
- Supports 2.4GHz and 5GHz spectrum analysis with the optional NXT Portable Spectrum Analyzer adapter.
- Empower technicians who may not have access to network management systems or other engineer-level tools to assess and document complex network deployments with multiple VLANs and Wi-Fi SSIDs
- Seamlessly consolidate and manage field test data, and integrate with network management systems via Link-Live™

All-in-One Platform Addresses Multiple Technologies

- Smart handheld network tester that verifies, discovers, maps, and troubleshoots Wi-Fi and Ethernet network infrastructures
- Native 2x2 Wi-Fi 6/6E radio that supports:
 - 802.11a/b/g/n/ac/ax Wi-Fi network connectivity
 - Analysis of SSIDs, BSSIDs, channel, client devices, and interference sources
- Ethernet port supports:
 - 10/100Mbps to 1/2.5/5/10Gbps
 - 802.3af/at/bt PoE load testing up to 90W
- Built-in Bluetooth v5/BLE radio for connectivity and conducting BT/BLE site surveys

Main Ethernet Test Ports (RJ-45 & SFP)

USB-A

Cable Test & Management Ports

USB-C



Optional NXT-1000 Portable Spectrum Analyzer for 2.4/5GHz.



***NOTE:** Spectrum analysis requires the optional NXT-1000 Portable Spectrum Analyzer for 2.4/5GHz. Enhanced site survey visualizations and filtering are available to customers with AllyCare support on their EtherScope nXG. For information about AllyCare, go to support.netally.com/allycare/

Key Features *(continued)*



Wired + Wi-Fi Network Discovery, Mapping, Analysis, and Security Audits

Instantly see what is on the network and where it is connected, by switch, slot and port number. Quickly investigate and locate “suspect” devices and identify problems associated with device misconfigurations.

- Discover network devices across multiple VLANs and Wi-Fi SSIDs through four Wi-Fi and Ethernet interfaces upon power up
- Discovery Difference analysis in Link-Live exposes possible security risks in the network infrastructure by showing changes in connected devices
- Powerful filter and sort function with automatic problem detection identifies issues such as:
 - Duplicate IPs, congested switch ports, and oversubscribed Wi-Fi channels/SSIDs
 - Security issues, such as unknown switches, access points with open authentication
- Path Analysis shows the switch/router path to any connected device
- Batch authorization workflow makes it easy to identify known vs. unknown devices, enabling “who’s on my network” auditing



10G Line Rate Performance Test and Packet Capture

Verify network capacity, performance and QoS, and easily capture packets for detailed application analysis.

- Simultaneously generate and measure up to eight streams of IP-based traffic through the Ethernet test port to:
 - Load the network with up to full 10G line-rate traffic
 - Test for packet loss, delay, and jitter
- Supports popular iPerf network throughput testing for Wi-Fi and Wired networks
- Capture wired or wireless traffic to PCAP files for escalation evidence or analysis, with simple - but powerful - filtering and slicing controls



Verify Complex Networks - Wired and Wireless

Test automation speeds and simplifies validation and troubleshooting - so more people can solve more problems, faster.

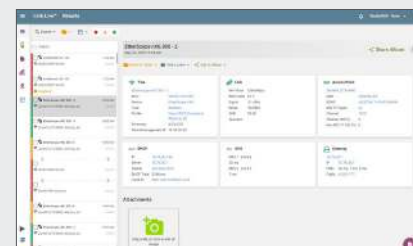
- Out-of-the-box AutoTest profiles for Wi-Fi and wired networks that can be customized for your network
- Execute multiple AutoTest profiles that shorten test time to verify multiple VLANs and Wi-Fi SSIDs
- Define and assign groups of targets to AutoTest profiles to verify performance using ping, TCP Connect, Web, or FTP



Simplified Collaboration, Automated Reporting

Collaborate with staff across your organization with centralized visibility of distributed tests, speeding resolution of remote site issues.

- Link-Live collaboration, reporting, and analysis platform (cloud-based or private/on-premise) stores test result and site data upload for automated reporting and documentation
- Simplifies report generation across media types for network deployment documentation
- Attach photos and user comments to each result, adding context for future changes and troubleshooting
- Available API enables seamless data integration between Link-Live and trouble-ticket or network management systems



Simplify report generation across media types for network deployment documentation

Native Wi-Fi 6 and 6GHz Support

With the introduction of Wi-Fi 6/6E how WLAN validation and troubleshooting is done has changed. New technologies designed to improve traffic management efficiency and support for the 6GHz band were introduced, allowing for higher throughput and better performance in environments where a high user capacity is required – necessitating new technology to test and validate these networks.

- Validate actual Wi-Fi 6/6E network performance by using a native 802.11ax radio
- Gain visibility into all Wi-Fi and Bluetooth/BLE devices working on the 2.4GHz, 5GHz, and 6GHz bands*
- Enables packet captures of Wi-Fi 6 control, management, and data frames in all three bands
- Diagnose new Wi-Fi 6E mechanisms of Reduced Neighbor Reports, Preferred Scanning Channels, and multi-BSSIDs
- Authenticate using the latest security standard of WPA3 and Enhanced Open

***NOTE:** Wi-Fi 6/6E regulatory compliance implementation of the 6GHz spectrum varies by country. EtherScope nXG 300 models are available in three versions; see *Models and Accessories* for additional information.



Wi-Fi Bands



Visualize survey data in Link-Live or in AirMagnet Survey PRO for additional analysis



AirMapper Site Survey App on the EtherScope nXG

AirMapper™ Site Survey – Now supporting Wi-Fi 6/6E

With the AirMapper app, AirCheck G3 users can quickly and easily gather location-based Wi-Fi and Bluetooth/BLE measurements and create visual heat maps of key performance metrics in the Link-Live collaboration, reporting, and analysis platform. Simple to use, the AirMapper app is ideal for quick site surveys of new deployments, change validation, and performance verification.

Survey project management capabilities in Link-Live provide a major boost in productivity and collaboration for distributed teams conducting surveys at remote sites. A team lead can create a project in Link-Live, upload and calibrate the floor plan, then automatically push the configured project out to the desired remote analyzers.

- Faster and easier Wi-Fi and Bluetooth/BLE site surveys with a rugged handheld analyzer
- Automatically identify common Wi-Fi network problems using InSites™ intelligence analysis in Link-Live
- Collaborate - easily visualize and share survey data through Link-Live
- Simultaneous passive and active Wi-Fi surveys to gather critical site metrics and validate client experience and roaming with one survey
- Export Wi-Fi survey data to AirMagnet® Survey PRO for more advanced analysis, planning and reporting



Frequency Spectrum App on the EtherScope nXG

Spectrum Analysis and Interference

Trying to pinpoint the source of Wi-Fi interference on a wireless network is hit or miss with the wrong tools. Through the use of the optional NXT-1000 Mobile Spectrum Analyzer, EtherScope nXG offers a view of RF interference in the 2.4 and 5GHz bands and its impact on the wireless network's overall performance. Key graphs and charts include:

Real-Time Spectrum – Provides a live RF view including current, average, and max readings

Frequency Spectrum – Displays heat mapped signal density to identify recurring energy

Spectrogram – Shows energy over time to identify the periodic nature of the RF environment

Models & Accessories

IMPORTANT NOTES: WiFi 6/6E Regulatory Compliance Implementation of the 6GHz spectrum varies by country. EtherScope nXG 300 models are available in three versions: Full Tri-Band (capability across the entire 6GHz band), Partial Tri-Band (capability for only certain channels in the 6GHz band as determined by 802.11d regulatory domain information), and Dual Band Only (for countries where operation in the 6GHz band is not allowed.) Be sure to select the model that is certified for use in your specific country. Please contact your NetAlly reseller for more information.

The models shown on the table below are for the “Full Tri-Band” version. Replace “EXG-300” with the following for the other model types:

EXG-300E Partial Tri-Band
EXG-300C Dual Band Only (2.4/5GHz)

Inclusion of AllyCare Support

All new EXG-300 mainframes are sold with the first year (1 year) of AllyCare support included. Additional year(s) of support may be added. Product registration and activation is required within 30 days of first power-on.

Model Number/Name	Description
EXG-300	EtherScope nXG Portable Network Expert Includes: EXG-300 mainframe (FULL TRI-BAND) with one year of AllyCare support (EXG-300-1YS), Li-ION battery, G3-PWRADAPTER, SFP+MR-10G850, Inline RJ-45 coupler, WIREVIEW 1, <i>Quick Start Guide</i> , and shoulder bag.
EXG-300-KIT	EtherScope nXG Portable Network Expert Professional Kit Includes: EXG-300 mainframe with one year of AllyCare support (EXG-300-1YS), NXT-1000 Spectrum Analyzer, G3-PWRADAPTER, EXG-LR10G-HOLSTER, SFP+MR-10G850, SFP+MR-10G1310, RJ-45 inline coupler, EXT-ANT-TRIBAND, TEST-ACC, WIREVIEW 1-6, <i>Quick Start Guide</i> , and medium softcase.
EXG-300-KIT-2PK	Includes: Two EXG-300-KIT. Each unit comes with one year of AllyCare support (EXG-300-1YS). Purchase two EXG-300-1YS for an additional 1-year of AllyCare Support, or two EXG-300-3YS for an additional 3-years of AllyCare Support.
EXG-300-LR10G2-KIT	EtherScope nXG 10G Performance Test Kit Includes: Qty 1 EXG-300 mainframe, Qty 1 LR10G-200 mainframe, Qty 2 EXG-LR10G-HOLSTER, Qty 2 G3-PWRADAPTER, Qty 2 SFP+MR-10G850, Qty 2 SFP+MR-10G1310, Qty 2 RJ-45 inline coupler, Qty 1 EXT-ANT, Qty 1 TEST-ACC, Qty 2 WIREVIEW 1-6, Qty 2 <i>Quick Start Guide</i> , Qty 1 small softcase, Qty 1 Medium Softcase. Purchase EXG-300-1YS and LR10G-200-1YS for 1-year AllyCare Support or EXG-300-3YS and LR10G-200-3YS for 3-years AllyCare Support.
EXT-ANT-TRIBAND	2.4/5/6GHz directional antenna for use with AirCheck G3 and EtherScope nXG
Upgrade Models - Available for Current EXG-200 Owners	
EXG-300-UGD1	SPECIAL PRICING for EXG-200 owners with AllyCare support. Includes: EXG-300 mainframe (FULL TRI-BAND) with one year of AllyCare support (EXG-300-1YS), Li-ION battery, G3-PWRADAPTER, SFP+MR-10G850, Inline RJ-45 coupler, WIREVIEW 1, <i>Quick Start Guide</i> , and shoulder bag. SKU IS RESTRICTED - NETALLY MUST AUTHORIZE QUOTATION.
EXG-300-UGD2	SPECIAL PRICING for EXG-200 owners WITHOUT AllyCare support. Includes: EXG-300 mainframe (FULL TRI-BAND) with one year of AllyCare support (EXG-300-1YS), Li-ION battery, G3-PWRADAPTER, SFP+MR-10G850, Inline RJ-45 coupler, WIREVIEW 1, <i>Quick Start Guide</i> , and shoulder bag. SKU IS RESTRICTED - NETALLY MUST AUTHORIZE QUOTATION.
AllyCare Support - One year of support is included. Use these support model numbers for extending support at time of purchase or for support renewal.	
EXG-300-1YS	One year AllyCare support for all EXG-300 models, including full tri-band, “E” (partial tri-band), and “C” (dual band 2.4/5GHz only) SKUS: EXG-300, EXG-300-KIT, EXG-300-KIT-2PK (covers only a single unit), EXG-300-LR10G2-KIT (covers EXG-300 only)
EXG-300-3YS	Three year AllyCare support for all EXG-300 models, including full tri-band, “E” (partial tri-band), and “C” (dual band 2.4/5GHz only) SKUS: EXG-300, EXG-300-KIT, EXG-300-KIT-2PK (covers only a single unit), EXG-300-LR10G2-KIT (covers EXG-300 only)

Specifications (For full specifications, please refer to the product data sheet)

General	
Dimensions	4.05 in x 7.67 in x 2.16 in (10.3 cm x 19.5 cm x 5.5 cm)
Weight	1.68 lbs. (0.77 kg)
Battery	Removable, rechargeable lithium-ion battery pack (7.2 V, 6.4 A, 46 Wh)
Battery Life	Typical operating life is 3-4 hours (Battery life from full charge varies depending on the feature being used); Typical charge time is 3 hours
Display	5.0-inch color LCD with capacitive touchscreen (720 x 1280 pixels)
Host Interfaces	(1)RJ-45 and (1)SFP Analysis ports; (1) RJ-45 Cable Test and Management Port RJ-45 Cable Test and Management Port; (1)USB Type-A Port and (1)USB Type-C On-the-Go Port SMA Connector (for External Directional Antenna)
Charging	USB Type-C 45-W adapter: 100-240 Vac, 50-60 Hz; DC Output Power 15 V (3 A)
Media Access	Copper: 10M/100M/1G/2.5G/5G/10G Fiber SFP Adapters: 1G/10GBASE-X
Supported IEEE Standards	Wired: 802.3/ab/ae/an/bz/i/u/z Wi-Fi: 802.11a/b/g/n/ac/ax PoE: 802.3af/at/bt, Class 0-8 and UPOE
Cable Test	Pair lengths, opens, shorts, split-pairs, crossed, straight through, and WireView ID

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