EtherScope™ nXG
Portable Network Expert

netAlly®

Mühendislik ve Dış Ticaret Anonim Şirketi

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

EtherScope® nXG
Portable Network Expert

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

- Quickly test, verify, troubleshoot, and map Wi-Fi and wired networks
- Faster and easier Wi-Fi and Bluetooth/BLE site surveys with AirMapper™
- NEW! 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 Android™-based troubleshooting apps and purpose-built test hardware
- Verify up to 10G Ethernet link performance for critical servers, uplinks and key end devices, and validate Wi-Fi network performance
- 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 complimentary Link-Live™ Cloud Service
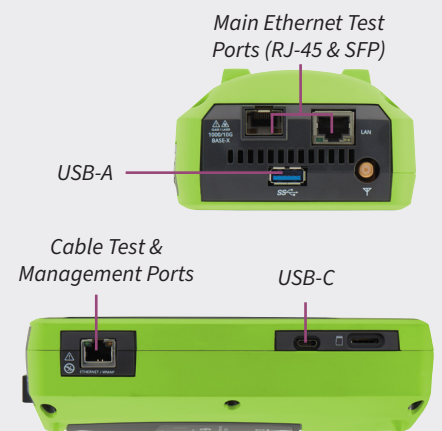
All-in-One Platform Addresses Multiple Technologies

- An Android-based handheld network tester that verifies, discovers, maps, and troubleshoots Wi-Fi and Ethernet network infrastructures
- Native 4x4 Wi-Fi that supports:
  - 802.11a/b/g/n/ac (wave 2) Wi-Fi network connectivity
  - Wi-Fi 6 network visibility
  - Analysis of SSIDs, BSSIDs, channel, client devices, and interference sources
- Ethernet port supports:
  - 10/100/1000Mbps to 2.5/5/10G
  - Verifies loaded power from 90W PoE switch
- Built-in Bluetooth v5/BLE radio for connectivity and conducting BT/BLE site surveys

Now with Bluetooth/ BLE Site Survey

The first integrated Bluetooth/ BLE site survey solution. Measures BT/BLE beacon signal strength, coverage, and configuration.

Main Ethernet Test Ports (RJ-45 & SFP)

USB-A

Cable Test & Management Ports

USB-C

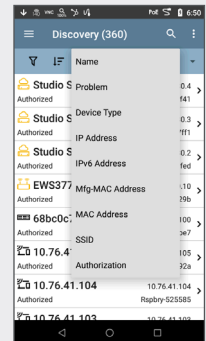*Android is a trademark of Google LLC*

NOTE: *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.
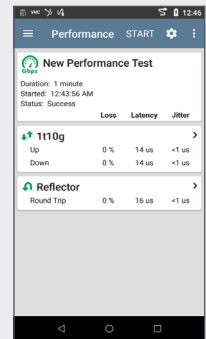
- Discover network devices across multiple VLANs and Wi-Fi SSIDs through four Wi-Fi and Ethernet interfaces upon power up
- Discovery Difference analysis in Link-Live exposes possible security risks in the network infrastructure by showing changes in connected devices
- Powerful filter and sort function 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 and unencrypted APs
- 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.
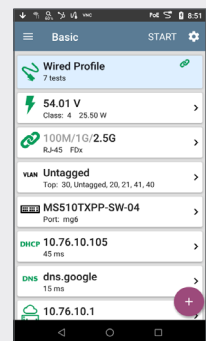
- Simultaneously generate and measure up to four streams of IP-based traffic through the Ethernet test port to:
  - Load the network with up to full 10G line-rate traffic
  - Test for packet loss, delay, and jitter
- Supports popular iPerf network throughout testing for Wi-Fi and Wired networks
- Capture 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.
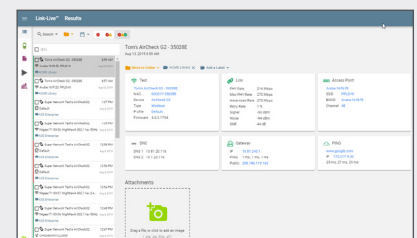
- Out-of-the-box AutoTest profiles for Wi-Fi and wired networks that can be customized for your network
- Execute multiple AutoTest profiles that shorten test time to verify multiple VLANs and Wi-Fi SSIDs
- Define and assign groups of targets to AutoTest profiles to verify performance using ping, TCP Connect, Web, or FTP
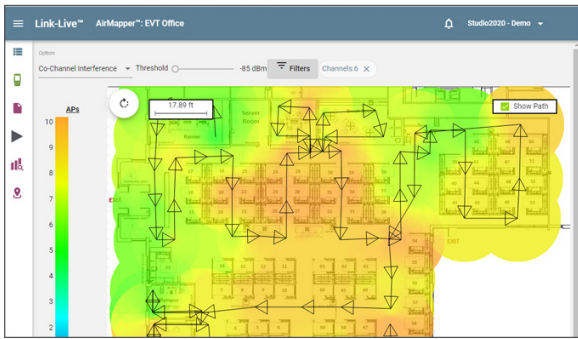
Simplified Collaboration, Automated Reporting

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

- Complimentary Link-Live Cloud Service stores test result and site data upload for automated reporting and documentation
- Simplifies report generation across media types for network deployment documentation
- Attach photos, 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
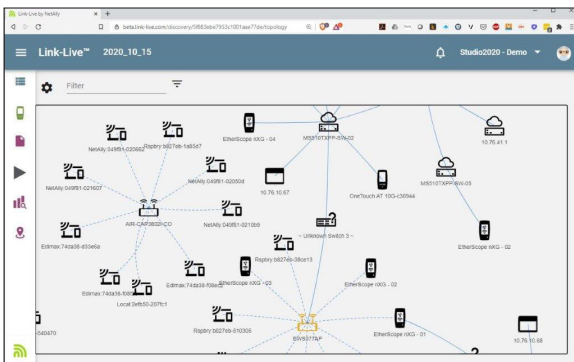
Link-Live™
Cloud Service

Recent Enhancements

Visualize survey data in cloud-based Link-Live Service, or in AirMagnet Survey PRO for additional analysis

AirMapper Site Survey App

AirMapper™ Site Survey – Now for Bluetooth/BLE

With the AirMapper app, EtherScope nXG users now quickly and easily gather location-based Wi-Fi measurements and create visual heat maps of key performance metrics in the Link-Live Cloud Service. Wi-Fi survey data can be imported in AirMagnet Survey PRO for detailed reporting, analysis, and predictive modeling. Simple to use, the AirMapper app is ideal for quick site surveys of new deployments, change validation, and performance verification.

- Complete faster and easier Wi-Fi and Bluetooth/BLE site surveys with an entirely mobile platform
- Perform enterprise-grade surveys without the need of a dongle or tethered device with a hardware-based platform for accurate and complete data collection
- Collaborate—easily visualize and share survey data through Link-Live Cloud Service
- Simultaneous passive and active Wi-Fi surveys to gather critical site metrics and validate client experience and roaming with one survey
- Pass survey data to AirMagnet Survey PRO for more advanced analysis, planning and reporting

NOTE: *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/*

Network Topology Mapping – Integrated Wired and Wi-Fi Network Diagrams

Automated Wired and Wi-Fi network mapping

No more struggling to keep manually drawn maps up to date! EtherScope nXG automatically discovers both your wired and Wi-Fi networks for instant mapping in the complimentary Link-Live Cloud Service. These comprehensive, up-to-the-minute-accurate network diagrams show your network as it is NOW, integrating Layer 2 and Layer 3 topology information, including these connections: switch to host, switch to Access Point, AP to Wi-Fi client, switch to switch, switch to router, and router to router hops.

Easy to use filters and map controls allow you to see exactly what you want, and how you want it displayed. Quickly identify network and device configuration errors, and see 'unknown' switches and rogue devices. Element icons are color-coded to identify errors or warnings; double-clicking on any map element brings up its detailed discovery information, including status, problems, interface information, and more (device names, IP addresses, VLANs).

Link-Live makes it easy to collaborate and share maps to anyone who needs access, with no added licensing costs. One click exports your map to Microsoft Visio® where you can easily add notations and modify your map.

NOTE: *Customers with AllyCare get access to in-depth map configuration, controls, and export to Visio. For information about AllyCare, go to support.netally.com/allycare/*

Multi-Gig Link Validation with LANBERT™ Media Qualification App

With the expanding deployment of Multi-Gig switching (typically to feed greater bandwidth to Wi-Fi 6 access points), users are finding that their cable plant may not support the desired speed. Cable quality, length, installation workmanship, and noise in the environment all can contribute to "downshifting" to lower-than-expected speeds.

The only way to know for certain is to test the capacity and quality of the cabling - but traditional cable certification tools can be expensive. Or worse, a link may fail a certification test, leading to a costly and potentially unnecessary upgrade. That's where the LANBERT app comes in.

LANBERT generates and measures the transmission of line-rate Ethernet frames over your network cabling infrastructure, qualifying its ability to support 1G/10G on fiber and 100M/1G/2.5G/5G/10G on copper links. *(Using LANBERT requires instrumentation on both ends of the link; choose from various loopback or reflector options, or another EtherScope nXG or LinkRunner 10G. See data sheet for details.)*

- Maximize utilization of your existing cable plant
- Qualify copper cable bandwidth for 2.5 / 5 / 10Gbps
- Validate 1Gbps/10Gbps fiber optic cabling and components
- Identify maximum error-free throughput
- **Cabling SNR Measurement –** EtherScope nXG can now verify copper media for Multi-Gig capability (1 / 2.5 / 5 / 10Gig), and provide root cause diagnosis when link speed downshifting occurs.

LANBERT Ethernet frame-level testing and cabling SNR...

24-Hour Monitoring for Intermittent Issues

Periodic AutoTest – In this mode, AutoTest runs at specified intervals (from 1 minute to 24 hours) and sends the results to Link-Live to view the results over time. This is an effective way to "monitor" aspects of your network for an extended period, or to help diagnose intermittent issues without having to manually execute multiple tests. Results are automatically timestamped and can be prefixed with a user-entered comment for grouping or organization. Test results can be quickly analyzed in Link-Live using the filtering and sorting functions. Email notifications can warn you when errors are found.

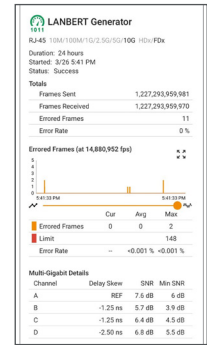## Simplified "Access-Anywhere" Remote Control

EtherScope nXG permits remote control via VNC, which is easy when your workstation is on the same network. But connecting to distant sites on different networks is difficult or impossible, particularly behind NAT firewalls. Now, users can instantly connect to remote units through the Link-Live Cloud Service – anywhere in the world – for collaborative and remote troubleshooting.
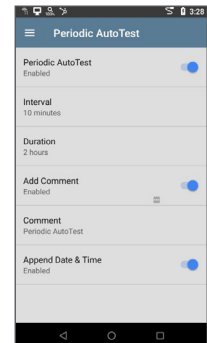

Monitor your network for intermittent issues

NOTE: *This feature is only available to customers with AllyCare support on their EtherScope nXG. For information about AllyCare, go to support.netally.com/allycare/*
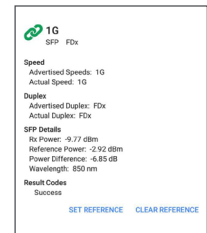
Optical Power Meter

When connected with fiber, the AutoTest Link card has been augmented with the ability to set a reference and display the current power reading relative to that reference. This is useful for saving the power level at the source as a reference, then measuring the fiber power loss at the far end.

Optical power meter

Models & Accessories

Model Number/Name	Description
EXG-200	Includes: (1) EXG-200 mainframe with Li-ION battery, G3-PWRADAPTER, SFP+MR-10G850, Inline RJ-45 coupler, WireView wire mapper #1, *Quick Start Guide*, and small soft case.
EXG-200-1YS	1 Year AllyCare Support for EXG-200, EXG-200-KIT, EXG-200-LRG2-KIT (covers EXG-200 only)
EXG-200-3YS	3 Year AllyCare Support for EXG-200, EXG-200-KIT, EXG-200-LRG2-KIT (covers EXG-200 only)
EXG-200-KIT	Includes: (1) EXG-200 mainframe with Li-ION battery, G3-PWRADAPTER, G3-HOLSTER, SFP+MR-10G850, SFP+MR-10G1310, RJ-45 inline coupler, (1) Test Accessory, WireView wire mappers #1-#6, external directional antenna, *Quick Start Guide,* and medium soft case.
EXG-200-KIT-2PK	Includes: (2) EXG-200-KIT
EXG-200-LRG2-KIT	Includes: (1) EXG-200-KIT and (1) LinkRunner G2 (LR-G2)
EXG-LR10G-KIT	**10G Performance Test Kit** Includes: EXG-200-KIT and LR10G-100 (LinkRunner 10G) *Purchase EXG-200-1YS and LR10G-100-1YS for 1 year AllyCare Support or EXG-200-3YS and LR10G-100-3YS for 3 years AllyCare Support.*
EXG-200-CE	**EtherScope nXG CE - Controlled Edition for Secure Environments** Includes: EXG-200-CE mainframe with Li-ION battery, G3-PWRADAPTER, SFP+MR-10G850, Inline RJ-45 coupler, WireView wire mapper #1, *Quick Start* Guide, and small softcase. *Purchase EXG-200-1YS or EXG-200-3YS for AllyCare Support.*
EXT-ANT	External Directional Antenna
G3-PWRADAPTER	AC Charger replacement/spare for EXG-200 mainframe with country power cords.
EXG-LR10G-HOLSTER	Holster for EtherScope nXG, EtherScope nXG CE, and LinkRunner 10G mainframes
SFP+MR-10G850	SFP+ Optical Transceiver Module, SX/SR, 1G/10G, 850nm, Multimode
SFP+MR-10G1310	SFP+ Optical Transceiver Module, LX/LR, 1G/10G, 1310nm, Singlemode

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
Cable Test	Pair lengths, opens, shorts, split-pairs, crossed, straight through, and WireView ID

netally.com/products/etherscopenxg

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simplicity • visibility • collaboration

NXG-FL-21-V4