## **ລາ netAlly**

## AirCheck<sup>™</sup>G3 Pro Wi-Fi 6 Wireless Analyzer

# Rugged instrument for comprehensive network validation and troubleshooting

- Native Wi-Fi 6, 2.4/5/6GHz band, and Bluetooth/BLE support
- Quickly test, verify, troubleshoot, and map Wi-Fi networks
- Faster and easier Wi-Fi and Bluetooth/BLE site surveys with AirMapper<sup>™</sup> Site Survey app
- Quickly find the physical location of Wi-Fi access points and clients on the 2.4GHz, 5GHz, and 6GHz bands

#### **Overview**

The AirCheck G3 Wireless Analyzer's intuitive user interface provides actionable intelligence, speeding and simplifying wireless deployment, troubleshooting and validation. AirCheck G3 is the most cost-effective hardware-enabled site survey solution for Wi-Fi 6/6E networks. It provides network professionals of any skill level with complete and accurate information to survey and validate Wi-Fi deployments and changes, resolve connectivity and performance problems quickly, speed up closure of trouble tickets, and ensure your Wi-Fi network meets end users' needs.

With powerful tools suited for wireless engineers, but ease of use for technicians and remote "smart hands" AirCheck G3 Pro makes your entire team more productive.





#### **Key Features**

- Test, verify, and troubleshoot technology upgrades, Wi-Fi 6/6E networks, and Bluetooth/BLE devices with advanced testing apps and purpose-built hardware
- Validate Wi-Fi 6/6E network performance for critical services and key end devices
- Supports full 2.4GHz and 5GHz spectrum analysis with the optional NXT-1000 Portable Spectrum Analyzer adapter
- Enables remote engineers to troubleshoot and collaborate with on-site technicians with cloud remote control in Link-Live™
- Seamlessly consolidate and manage field test data, and integrate with network management systems via Link-Live<sup>™</sup>

### 🖧 Flexible Platform Addresses Multiple Technologies

- 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
- 1x1 Wi-Fi 5 radio that supports:
   Remote control connection and testing
   Network discovery and topology mapping
- Built-in Bluetooth v5/BLE radio for peripheral connectivity and conducting BT/BLE site surveys
- USB interfaces provide connectivity for accessories and other devices









## 🕷 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 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



Wi-Fi Bands

**\*NOTE:** Wi-Fi 6/6E regulatory compliance implementation of the 6GHz spectrum varies by country. AirCheck G3 models are available in three versions; see Models and Accessories for additional information.



AirMapper Site Survey App on the AirCheck G3



Spectrum App on the AirCheck G3

## ( AirMapper<sup>™</sup> 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<sup>®</sup> Survey PRO for more advanced analysis, planning and reporting

### (IIII) 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, AirCheck G3 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

## 🚱 Verify Complex Wireless Networks

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

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

Instantly see what is on the network and where it is connected. Quickly investigate and locate "suspect" devices and identify problems associated with device misconfigurations.

- Discovers network devices across multiple VLANs and Wi-Fi SSIDs
- 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 athentication
- 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.

## 🚱 Wi-Fi Performance Test and Packet Capture

Verify Wi-Fi performance, and easily capture packets for detailed application analysis.

- Simultaneously generate and measure IP-based traffic through the use of two Wi-Fi radios
- Supports popular iPerf network throughput testing for Wi-Fi networks
- Capture wireless traffic to PCAP files for escalation evidence or analysis, with simple but powerful - filtering and slicing controls.

## 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 for network deployment documentation
- Attach screenshots 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



Customize profiles for standardized testing





iPerf throughput test with TCP or UDP frames

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Simplify report generation across media types for network deployment documentation

#### **Models & Accessories**

#### **IMPORTANT NOTES:** *Wi-Fi 6/6E regulatory compliance implementation of the 6GHz spectrum varies by country.*

AirCheck G3 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 "AIRCHECK-G3-PRO" with the following for the other model types:

AIRCHECK-G3E-PRO Partial Tri-Band AIRCHECK-G3C-PRO Dual Band Only (2.4/5GHz)

#### Inclusion of AllyCare Support

All new AIRCHECK-G3-PRO mainframes are sold with the first year (1 year) of AllyCare support included. Additional year(s) of support may be added. Product registration and <u>activation is required within 30 days of first power-on.</u>



Model Number/Name	Description				
AIRCHECK-G3-PRO	Includes: AIRCHECK-G3-PRO mainframe with 1 year of AllyCare support (AIRCHECK-G3-PRO-1YS), shoulder sling bag, AC charger, <i>Quick Start Guide.</i>				
AIRCHECK-G3-PRO-KT	Includes: AIRCHECK-G3-PRO mainframe with 1 year of AllyCare support (AIRCHECK-G3-PRO-1YS), shoulder sling bag, AC charger, <i>Quick Start Guide</i> , external directional antenna, holster, and NXT-1000 spectrum analyzer.				
AIRCHECK-G3-PRO-TKT	Includes: AIRCHECK-G3-PRO mainframe with 1 year of AllyCare support (AIRCHECK-G3-PRO-1YS), shoulder sling bag, AC charger, <i>Quick Start Guide</i> , external directional antenna, holster, NXT-1000 spectrum analyzer, and Test Accessory.				
EXT-ANT-TRIBAND	2.4/5/6GHz directional antenna for use with AirCheck G3 and EtherScope nXG				
NXT-1000	NXT-1000 Portable Spectrum Analyzer				
G3-PWRADAPTER	AC charger replacement/spare for AIRCHECK-G3-PRO mainframe with country power cords				
G3-REPL-BA	LITHIUM-ION replacement battery for use with the AirCheck G3				
HOLSTER-G3	Field use carrying holster makes troubleshooting on the go easier. Openings allow access to all applicable buttons and interfaces.				
AllyCare Support - One year of support is included. Use these support model numbers for extending support at time of purchase or for support renewal.					
AIRCHECK-G3-PRO-1YS	1 year AllyCare support for all AIRCHECK G3 PRO models, including "E" (Partial Tri-Band) and "C" (Dual Band only) SKU'S: AIRCHECK-G3-PRO, AIRCHECK-G3-PRO-KT, AIRCHECK-G3-PRO-TKT.				
AIRCHECK-G3-PRO-3YS	3 years of AllyCare support for all AIRCHECK G3 PRO models, including "E" (Partial Tri-Band) and "C" (Dual Band only) SKU'S: AIRCHECK-G3-PRO, AIRCHECK-G3-PRO-KT, AIRCHECK-G3-PRO-TKT				

## **Specifications**

General	
Dimensions	4.98 in x 7.68 in x 1.65 in (102 mm x 196 mm x 42 mm)
Weight	1.05 lbs. (0.48 kg)
Battery	Rechargeable lithium-ion battery pack (3.63 V, 9.75 A, 35.39 Wh)
Battery Life	Typical operating life is 10 hours (Battery life from full charge varies depending on the feature being used); Typical charge time is 3-4 hours
Display	5.0-inch color LCD with capacitive touchscreen (720 x 1280 pixels)
Host Interface	2 USB Type-A Ports USB Type-C Power and On-the-Go Port RP-SMA External Antenna Port
Charging	USB Type-C 45-W adapter: AC Input Power 100-240 V, 50-60 Hz; DC Output Power 15V (3A)

#### **Specifications -** continued

Wireless					
AirCheck G3 has two internal Wi-Fi Radios:	Testing – 2x2 Tri-band 802.11ax wireless radio (IEEE 802.11a/b/g/n/ac/ax compliant) Management – 1x1 Dual-band 802.11ac Wave 2 + Bluetooth 5.0 and BLE wireless radio (IEEE 802.11a/b/ g/n/ac compliant)				
Specification Compliance	IEEE 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.11ax				
Wi-Fi Connectivity	802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.11ax				
Operating frequencies NOTE: These are the center frequencies of the channels that the AirCheck G3 tester supports.	Frequencies of channels received and transmitted: 2.4 GHz band: 2.412 to 2.484 GHz (channel 1 to channel 14)* 5 GHz band: 5.170 to 5.320 GHz, 5.500 to 5.700 GHz, 5.745 to 5.825 GHz (channel 36 to channel 165)* 6 GHz band: 5.925 to 7.125 GHz (channel 1 to channel 233)* (*) Where allowed by country regulations. NOTE: The tester transmits only on the frequencies allowed in the country where it is operating.				
Antennas					
Internal Wi-Fi Antennas	Minimum gain 2.0 dBi peak in the 2.4 GHz band, 1.5 dBi peak in the 5 GHz band, and 2.7 dBi peak in the 6 GHz band.				
External Directional Antenna	Antenna, frequency range 2.4 to 2.5 GHz, 4.9 to 5.9 GHz. and 6.0 to 7.1 GHz Minimum gain 6.4 dBi peak in the 2.4 GHz band, 8.9 dBi peak in the 5 GHz band, and 8.6 dBi peak in the 6 GHz band.				

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# **Premium Customer Services** ·

AllyCare is a comprehensive support and maintenance service for NetAlly's Network Tools and AirMagnet<sup>®</sup> software that offers significant value over standard warranty. Membership of AllyCare can be purchased as either a 1-year membership or the value-added 3-year membership rate.

#### support.netally.com

## netally.com/products/aircheck



simplicity • visibility • collaboration