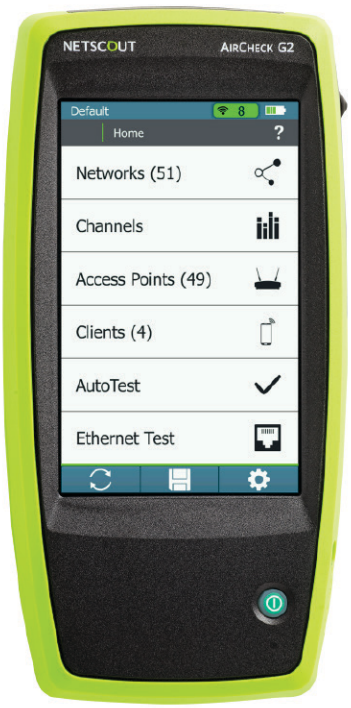
AirCheck G2 Wireless Tester

HIGHLIGHTS

Wi-Fi is a complex technology, but testing it doesn't have to be. AirCheck™ G2 Wireless tester is purpose built for the front-line IT responders dispatched to the complaints of:

- The Wi-Fi is not working or the Internet is down
- Provides fast, simple, and accurate isolation and troubleshooting
- Reduces the time to resolution of wireless issues



There are many variables that lead to Wi-Fi complaints, ranging from network based problems and configuration issues to environmental or client device misconfigurations. Collecting all the key pieces of information the very first time is key to every front-line IT responder to resolve any complaint. AirCheck G2 simplifies wireless troubleshooting by providing:

- A rugged, purpose-built wireless tester supporting the latest Wi-Fi technologies (802.11a/b/g/n/ac) that's easy to use and easy to carry
- A one-button AutoTest, which quickly provides a pass/fail indication of the wireless environment and identifies common problems - for any level of Wi-Fi expertise
- An instant view of test results including network availability, connectivity, utilization, rogue devices, and interference detection
- A centralized test results management platform, Link-Live, that facilitates greater job visibility, project control and fleet management for larger distributed environments

The intuitive user interface and management platform provides actionable intelligence to not only remove the complexity of wireless troubleshooting but also helps speed up closure of the trouble ticket. The cost of not getting the job done right the first time, leading to an escalation team visit, leads to ineffective usage of the escalation team efforts & end-user dissatisfaction due to slow problem-solving response time. AirCheck G2 provides front-line IT with complete & accurate wireless information to solve problems right the first time, instead of blindly escalating them.

Overview

AirCheck G2 integrates all Wi-Fi technologies plus interference detection, channel scanning, and connectivity tests. The one-button AutoTest and instant access to detailed information provides fast troubleshooting for the most common Wi-Fi pain points, including:

- Coverage problems
- Overloaded networks or channels
- Channel interference
- Connectivity problems
- Failed access points
- Rogue access points
- Client problems

AirCheck G2 Features Overview

Features	Benefits
Supports 802.11a/b/g/n/ac	All in one handheld tool for all Wi-Fi technologies including true 802.11ac 3x3 support.
Instant-on operation	Powers up fast and automatically starts discovering networks, access points (APs), and channel activity.
Touchscreen Display	5" Touchscreen display allows for better visibility and easier access to all the available operations/ inputs.
Get answers fast	The one-button AutoTest quickly provides a pass/fail indication of the wireless environment and identifies common problems - for any level of Wi-Fi expertise.
Link-Live Cloud Service	Cloud-based results management dashboard provides test results, project control, and reporting capabilities for your network connectivity tests.
Identifies security settings for each Network and Access Point	Open, WEP, WPA, WPA2, and/or 802.1x.
Pinpoints Wi-Fi traffic and interference	Shows how much of each channel's bandwidth is consumed by 802.11 traffic and interference, and the APs using each channel.
Finds rogue APs and misbehaving clients	Flags unauthorized APs and clients. Hunt them down with the LOCATE function or find them even faster with the optional directional antenna.
Connection tests	Connects to networks or specific APs using WEP, WPA, WPA2, and/or 802.1x. Acquires an IP address and pings the router, gateway, and user-defined addresses to verify connectivity and network access inside and outside the firewall. Verifies connection quality.
Wired Ethernet Tests	Allows for quick AP backhaul and wiring verification.
Designed for the field	Multi-hour battery life. One-handed operation. Rugged design.
Easy upgrades	The mini-USB port allows software upgrades in the field in just minutes using your laptop computer and the AirCheck G2 Manager Software. And with Gold support, you'll automatically receive upgrades at no additional charge.
AutoTest	Performs the following four essential Wi-Fi tests and a pass/fail indication of the wireless environment and identifies common problems – for any level of expertise.
Air Quality	Checks for Wi-Fi and non Wi-Fi utilization by channel, plus co-channel interference.
Ad Hoc Networks	Identify AP's that are configured in Ad Hoc mode since they could be a security risk.
Network Quality	Verify coverage, interference, security and ability to connect to specified networks.
Rogue Access Points	Identify AP's not listed in the profile.
Profiles	AutoTests are user configurable and based on the multiple profiles which can be stored in AirCheck G2 and selected for different sites or requirements. Results may also be stored for export to AirCheck G2 Manager or saved on the cloud using Link-Live.

AirCheck G2 Test Examples

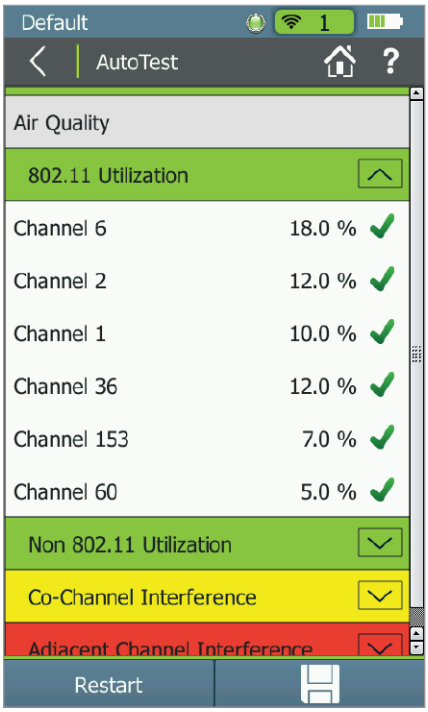


Figure 1: AutoTest UI.

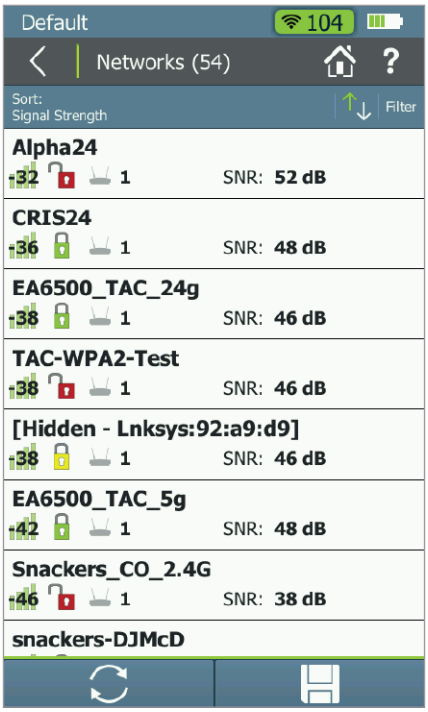


Figure 2: Networks UI.

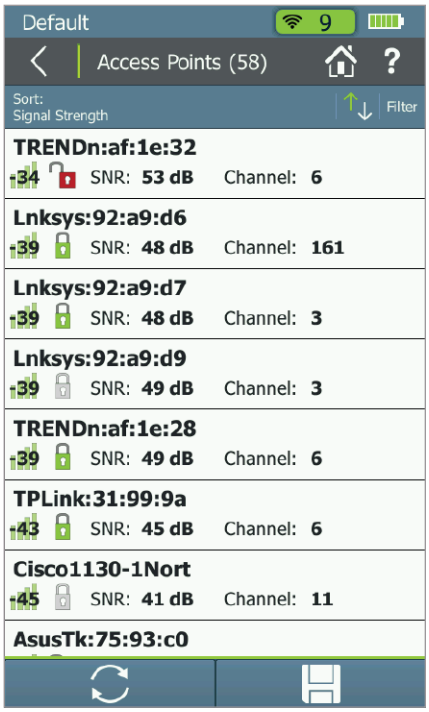


Figure 3: Access Points UI.

AutoTest

Performs the following four essential Wi-Fi tests and a pass/fail indication of the wireless environment and identifies common problems – for any level of expertise.

Networks

Find security issues, rogue APs and coverage problems and view a list of all wireless networks heard by AirCheck G2. Instantly see the following for each network:

- Signal level
- Security / encryption
- Number of APs in network
- SSID name
- Type of network

Access Points

Find configuration and coverage problems as well as rogue APs. View a list of all physical APs heard by AirCheck G2 or clients connected to a specific AP, and see the following:

- Channel
- Signal level
- AP name or MAC address
- SSID name (or count of SSIDs for virtual APs)
- Security / encryption
- Type of network

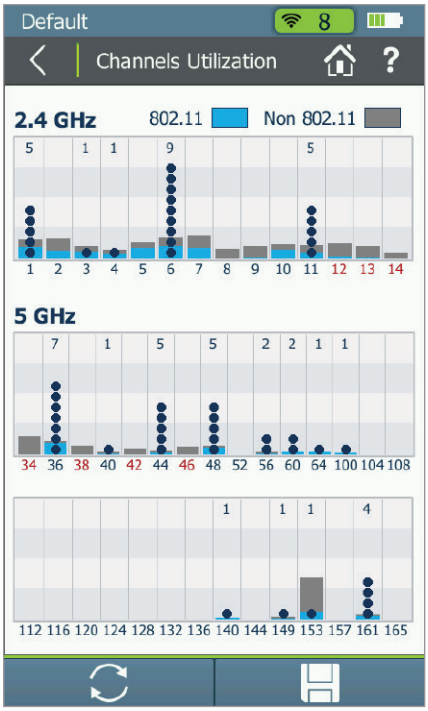


Figure 4: Channel Utilization UI.

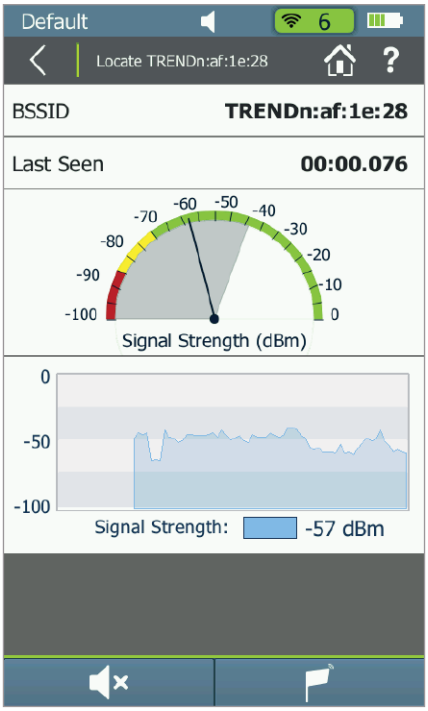


Figure 5: Locate UI.

Figure 6: Connected Clients UI.

Channel Usage

Quickly determine if channels are overloaded due to Wi-Fi traffic (displayed in blue) or interference (displayed in gray). Verify channel-usage pattern or overlap and flag illegal use of channels.

With AirCheck G2, you can also detect the presence of interference. Devices that can cause interference include microwave ovens, cordless phones and headsets, Bluetooth® devices, and analog video cameras.

Drill in further to see the level of Wi-Fi traffic and interference over the last 60 seconds on a selected channel, as well as the access points using this channel.

- Signal level
- Security / encryption
- Number of APs in network
- SSID name
- Type of network

Locate Access Points and Clients

Track down rogue and other APs or clients by graphing the signal strength over time, or by using an audible indication which can be muted.

Client Details

Quickly identify AP configuration problems. View the following information for each physical AP:

- Signal-to-noise ratio
- SSID and BSSID
- ACL status, security and encryption

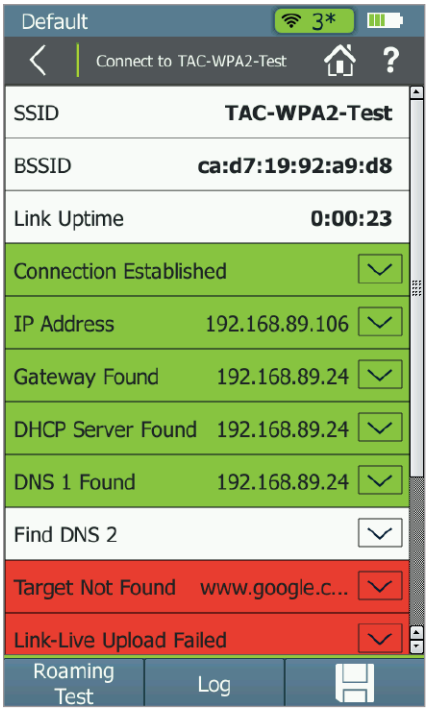


Figure 7: Connect to SSID UI.

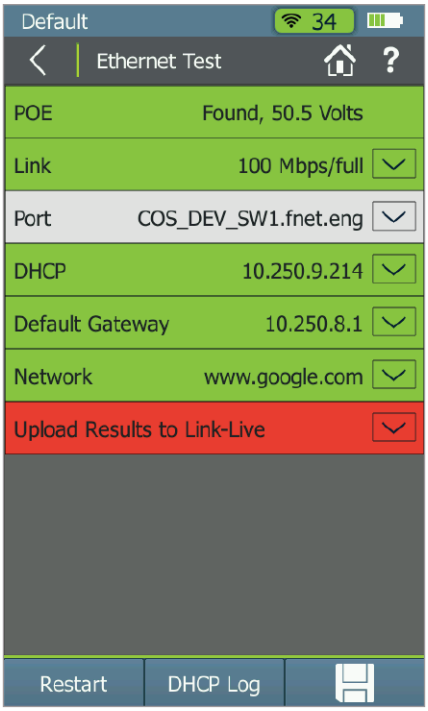


Figure 8: Ethernet Test UI.

Connect

Verify network availability and access by connecting to a network (SSID) or specified AP using three simple steps:

- Associate with AP
- Request IP address from DHCP server
- PING gateway, DHCP server and user-defined addresses
- TCP port connectivity

View the process steps on the display and store them in a log for troubleshooting. Quickly test performance and quality of the connection by using the continuous ping response, loss-rate, and connection-range features.

Ethernet Tests

Allows for Wi-Fi AP backhaul and wiring verification.

- Diagnose and test Power over Ethernet (PoE), Link to the switch, DHCP, Gateway, and Internet connection
- Get VLAN, switch name, and port information via CDP/LLDP/EDP for your managed switches
- Automated reporting to Link-Live Cloud Service
- Get detailed test results sent directly to your email
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Result Management Options

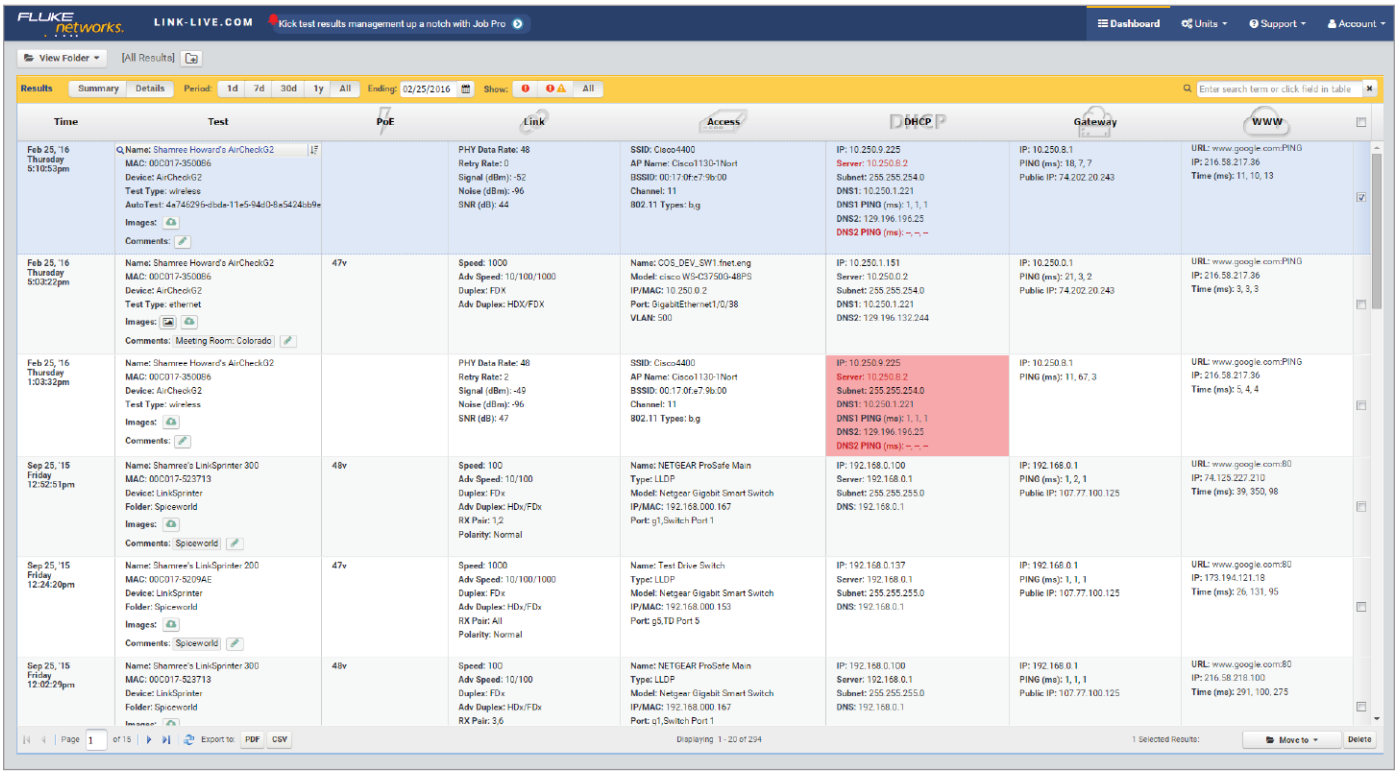

Figure 9: Link-Live Dashboard.

Link-Live Cloud Service

Once the AirCheck G2 is connected to the Link-Live Cloud service, basic network connectivity test results are automatically uploaded to the dashboard for project management and reporting. This internet-hosted service is available from anywhere at any time using any device with a browser and internet connection. It is especially useful for managers of remote teams that need visibility to test results instantly. In addition, teams that utilize the wired only companions to the AirCheck G2 such as the LinkSprinter, or LinkRunner have a single dashboard system to manage results from network connectivity tests.

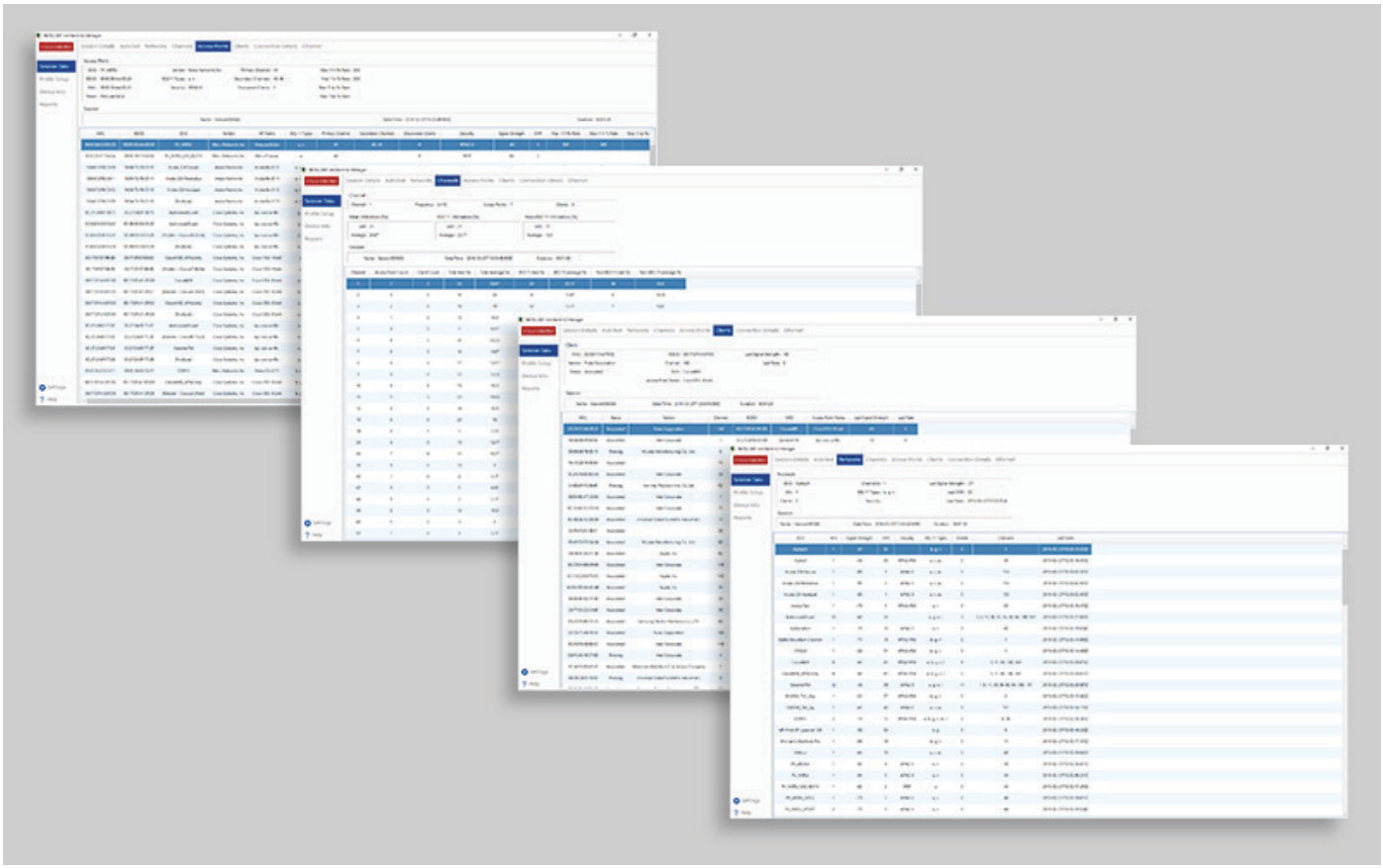

Figure 10: AirCheck G2 Manager Dashboards.

AirCheck G2 Manager Software

The AirCheck G2 Manager Software provides the ability to manage AirCheck G2 profiles and view detailed information on saved tests results. The AirMagnet Manager is free and available for download to any computer from the Link-Live Cloud Service.

Profiles

Easily configure, manage, and control the use of your AirCheck G2 – or an entire fleet of them – with the Profiles feature, which allows configuration of security settings, AutoTest limits, and target devices for connectivity. Name and transfer multiple profiles into AirCheck G2, as needed for different facilities. Profiles are password protected, eliminating worry about unauthorized access to your network if your AirCheck G2 is lost or stolen.

Record Sessions

You can easily view detailed information about networks, access points, channels, or clients on the AirCheck G2 Manager Software by viewing a saved session file. The session files will capture details including AirCheck G2 configuration, AutoTest results, lists of AP's / clients and channel usage.

Technical Specifications

General Specifications	
Dimensions	3.8 in x 7.7 in x 1.6 in (9.7 cm x 19.6 cm x 4.1 cm)
Weight	18 oz (0.51 kg)
Battery	Rechargeable lithium-ion battery pack (3.6 V, 6 Ah, 21 Wh)
Battery life	Typical operating life is 4.5 hours. Typical charge time is 7 hours
External AC adapter/charger	AC input 85-264 Vac 47-63 Hz input power DC output 15 Vdc at 2 amps
Display	5.0 in color LCD with capacitive touch screen (480 x 800 pixels)
Kaypad	1-key elastomeric (power only)
Host interface	1x micro USB Type B port
Adjunct interface	2x USB 2.0 Type A port
Wireless antenna	3x Internal
External antenna port	Input only. Reverse-polarity SMA connector

Environmental Specifications	
Operating temperature	32ºF to 113ºF (0ºC to +45ºC) The battery will not charge if the internal temperature of the tester is above 122ºF (50ºC)
Operating relative humidity (% RH without condensation)	90% (50ºF to 95ºF; 10ºC to 35ºC) 75% (95ºF to 113ºF; 35ºC to 45ºC)
Storage temperature	-4ºF to 140ºF (-20ºC to +60ºC)
Shock and vibration	1 m drop test, Random, 3.8 grms, 5 Hz-500 Hz
Safety	IEC 61010-1: Pollution degree 2
Altitude	4,000 m; Storage: 12,000 m
EMC	IEC 61326-1: Basic Electromagnetic Environment; CISPR 11: Group 1, Class A

Wireless Specifications	
Specification compliance	IEEE 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac
Wi-Fi Connectivity	802.11a, 802.11b, 802.11g, 802.11n, 802.11ac
Operating frequencies **These are the center frequencies of the channels that the AirCheck G2 tester supports**	**Frequencies of channels received** The tester receives on all of the frequencies in every country. 2.4 GHz band: 2.412 – 2.484 GHz (channel 1 to channel 14) 5 GHz band: 5.170 – 5.320 GHz, 5.500 – 5.700 GHz, 5.745 – 5.825 GHz (channels 34, 36, 38, 40, 42, 44, 46, 48, 52, 56, 60, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165) **Frequencies of channels transmitted:** The tester transmits only on the frequencies allowed in the country where it is Operating.2.4 GHz band 802.11b: 2.412 – 2.484 GHz (channel 1 to channel 14) 802.11g/n 20 MHz BW (HT20): 2.412 – 2.472 GHz (channel 1 to channel 13) 802.11n 40 MHz BW (HT40): 2.422 – 2.462 GHz (includes all combinations of legal, bonded pairs of channels)

Wi-Fi Antennas	
Internal Wi-Fi antennas	Three internal 2.4 GHz, 1.1 dBi peak, 5 GHz, 3.2 dBi peak antennas
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[1]	Reverse SMA

[1] External antenna port is receive-only (no transmit).

AirCheck Manager Software	
Supported operating systems	Windows 7, Windows 8.1, Windows 10
Processor	400 MHz Pentium processor or equivalent (minimum); 1 GHz Pentium processor or equivalent (recommended) RAM 96 MB (minimum)
RAM	256 MB (minimum); 512 MB (recommended)
Hard disk	Up to 500 MB of available space may be required
Display	1280 x 1024 high color, 32-bit (recommended)
Hardware	USB Port

Ordering Guide

Product	Description
AIRCHECK G2	AIRCHECK G2 WIRELESS TESTER
AIRCHECK-G2-1YS	1 Year Gold Tools Support for AIRCHECK-G2
AIRCHECK-G2-3YS	3 Year Gold Tools Support for AIRCHECK-G2
AIRCHECK-G2-KIT	AIRCHECK-G2 PLUS EXT-ENT, AUTO CHARGER, HOLSTER
AIRCHECK-G2-KIT-1YS	1 Year Gold Tools Support for AIRCHECK-G2 KIT
AIRCHECK-G2-KIT-3YS	3 Year Gold Tools Support for AIRCHECK-G2 KIT
ACKG2-HOLSTER	AIRCHECK G2 HOLSTER
ACKG2-LRAT2000	NETWORK TECH TROUBLESHOOTING KIT W/ACKG2,LRAT-2000
ACKG2-LRAT2000-1YS	1 Year Gold Tools Support for ACKG2-LRAT2000
ACKG2-LRAT2000-3YS	3 Year Gold Tools Support for ACKG2-LRAT2000
ACKG2-WBP-LION	AIRCHECK G2 LITHIUM ION REPLACEMENT BATTERY
EXT-ANT-RPSMA	EXTERNAL DIRECTIONAL ANTENNA, RSMA CONNECTOR
SOFTCASE-G2	SOFTCASE
PWR-CHARGER	AC CHARGER REPLACMENT

Certifications and Compliance	
CE	Conforms to relevant European Union directives
RCM	Conforms to relevant Australian Safety and EMC standards
C SP US	Certified by CSA Group to North American safety standards
FC	Complies with 47 CFR Part 15 requirements of the U.S. Federal Communications Commission
ANATEL	Certified by the National Agency of Telecommunications (Anatel)
KC	Conforms to relevant South Korean EMC Standards

Additional South Korean EMC Standards Information
Electromagnetic Compatibility. Applies to use in Korea only. Class A Equipment (Industrial Broadcasting & Communications Equipment)
[1] This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it.
This equipment is intended for use in business environments and is not to be used in homes.

NETSCOUT

Americas East
310 Littleton Road
Westford, MA 01886-4105
Phone: 978-614-4000
Toll Free: 800-357-7666

Americas West
178 E. Tasman Drive
San Jose, CA 95134
Phone: 408-571-5000

Asia Pacific
17F/B
No. 167 Tun Hwa N. Road
Taipei 105, Taiwan
Phone: +886 2 2717 1999

Europe
One Canada Square
29th floor, Canary Wharf
London E14 5DY, United Kingdom
Phone: +44 207 712 1672

NETSCOUT offers sales, support, and services in over 32 countries.

For more information, please visit enterprise.netscout.com or contact NETSCOUT at 800-309-4804 or +1 978-614-4000

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