

# AirCheck™ Wi-Fi Tester

Wi-Fi is a complex technology, but testing it doesn't have to be. The AirCheck Wi-Fi tester allows network professionals to quickly verify and troubleshoot 802.11 a/b/g/n networks.

Designed specifically for dispatched troubleshooting, AirCheck simplifies wireless testing by providing:

- Just a few clicks to the answers you need with streamlined, guided troubleshooting
- An instant view to required test results including network availability, connectivity, utilization, security settings, rogue hunting, and interference detection
- A rugged, purpose-built wi-fi tester that's easy to use and easy to carry

Its intuitive design makes it simple for anyone to quickly master AirCheck. Instant power-up and streamlined tests give answers in seconds so you can close trouble tickets faster – making technicians and users alike more productive. Easily manage test results and documentation using AirCheck Manager software. From start to finish, AirCheck helps take the guesswork out of everyday wireless troubleshooting.

## Overview

AirCheck integrates all Wi-Fi technologies plus interference detection, channel scanning, and connectivity tests. Quickly troubleshoot the most common Wi-Fi pain points, including:

- Coverage problems
- Overloaded networks or channels
- Interference
- Connectivity problems
- Failed access points
- Rogue access points
- Security settings
- Client problems

In addition to generating instant reports and documentation, AirCheck Manager software allows you to set up multiple profiles and manage network and security settings for a single unit, or an entire fleet of AirCheck testers.

## AirCheck Features

**Supports 802.11a/b/g/n** – All in one handheld tool.

**Instant-on operation** – Powers up in less than three seconds and automatically starts discovering networks, access points (APs), and channel activity.

**Get answers fast** – Intuitive user interface quickly gives you the answers you need in one or two button presses and displays the information on a bright color display.



**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** – Flags unauthorized APs. Helps you hunt them down with the LOCATE function or find them even faster with the optional directional antenna.

**Wi-Fi Troubleshooting Made Simple**



**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.

**Designed for the field** – Five-hour battery life. One-handed operation. Rugged design.

**Documents results** – Saves complete results of the current troubleshooting session for download to your PC with the push of a button.

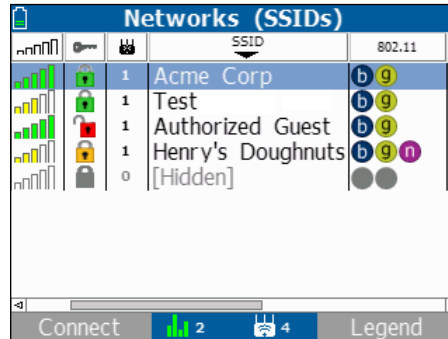
**Easy upgrades** – The mini-USB port allows software upgrades in the field in just minutes. And with Gold support, you'll automatically receive upgrades at no additional charge.

## AirCheck Functions

### List Networks

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

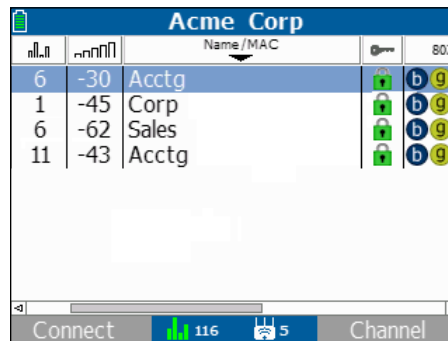
- Signal level
- Security / encryption
- Number of APs in network
- SSID name
- Type of network



### List Access Points

Find configuration and coverage problems as well as rogue APs. View a list of all physical APs heard by AirCheck including the following information:

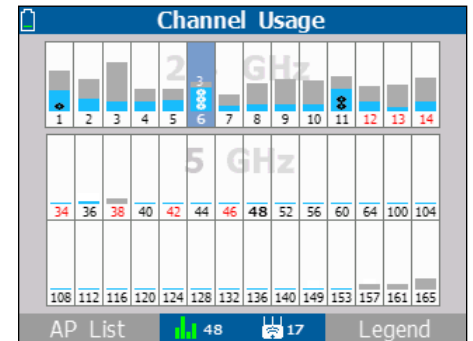
- Channel
- Signal level
- AP name or MAC address
- SSID name (or count of SSIDs for virtual APs)
- Security / encryption
- Type of network



## 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.

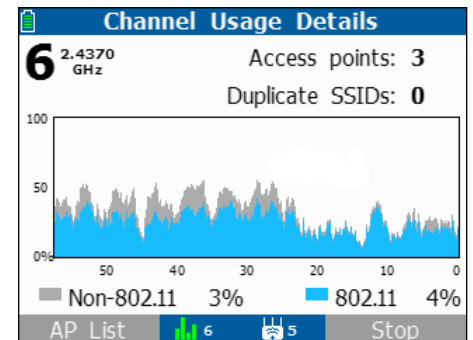
With AirCheck, you can also detect the presence of interference. Devices that can cause interference include microwave ovens, cordless phones and headsets, BlueTooth® devices, and analog video cameras.



## Channel Usage Details

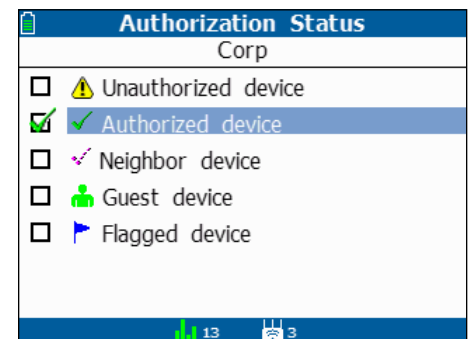
Find overloaded channels and interference.

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.



## Access Control Settings

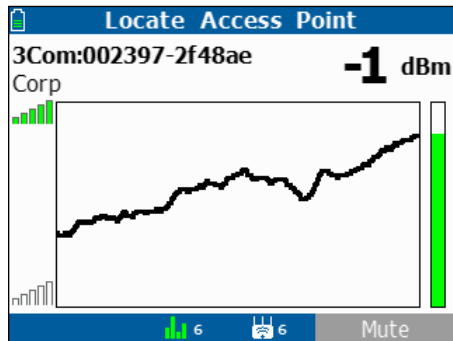
Quickly determine which access points are known and which are not by setting the authorization status for each AP seen by AirCheck. You may also define access control settings in AirCheck Manager and download them in a profile.





### Locate Access Points

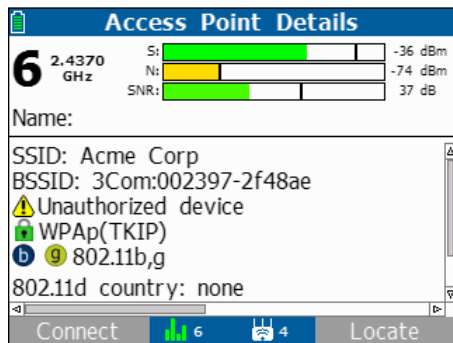
Track down rogue and other APs by graphing the signal strength over time, or by using an audible indication which can be muted.



### Access Point Details

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

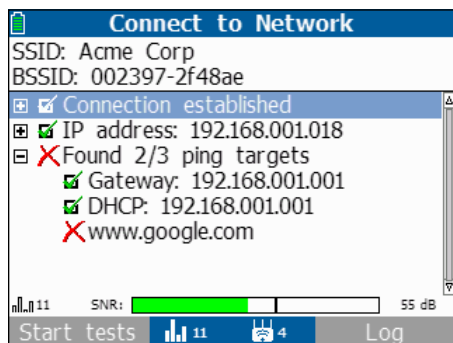
- Signal / noise / signal-to-noise ratio (current and max)
- SSID and BSSID
- ACL status
- Security / encryption



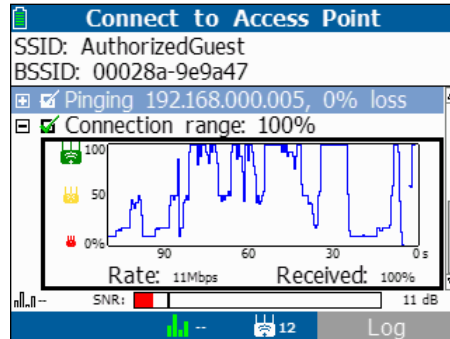
### Connect

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

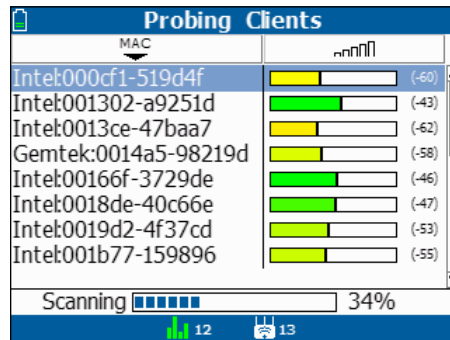


View the process steps on the display and store them in a log for troubleshooting. Quickly test performance and quality of the connection by using the continuous ping response, loss-rate, and connection-range features.



### List Probing Clients

Find misconfigured or failed client devices and view a list of all probing devices by MAC address and signal strength. Does not display associated clients.



AirCheck Manager Software

### AirCheck Manager Software

This software is included with AirCheck and provides two capabilities: the ability to manage AirCheck profiles and manage sessions recorded with AirCheck.

#### Profiles

Easily configure, manage, and control the use of your AirCheck – or an entire fleet of them - with the Profiles feature, which includes the following settings:

- Network configuration settings, including IP addressing and security / encryption
- Connectivity test settings, including target test devices
- Password protection for all settings

Name and transfer multiple profiles into AirCheck, as needed for different facilities. You can also transfer profiles from AirCheck to AirCheck Manager software.

Profiles are password protected, both in AirCheck and in AirCheck Manager, eliminating worry about unauthorized access to your network if your AirCheck is lost or stolen.

#### Record Session

Document what AirCheck is seeing to share or archive. Create summary or detailed reports allowing you to quickly close a trouble ticket or provide documentation for problem escalation.

Press one key to record all collected details for:

- AirCheck configuration
- Access points
- Probing clients
- Channel usage
- Connection details

Transfer sessions to a PC and easily view/store them using AirCheck Manager software.





## Technical Specifications

### Environmental

<b>Operating temperature and relative humidity</b>	32°F to 113°F (0°C to +45°C) Note: The battery will not charge if the internal temperature of the tester is above 104°F (35°C)
<b>Operating relative humidity (% RH without condensation)</b>	90% (50°F to 95°F; 10°C to 35°C) 75% (95°F to 113°F; 35°C to 45°C)
<b>Storage temperature</b>	-4°F to 140°F (-20°C to +60°C)
<b>Shock and vibration</b>	Random, 2 g, 5 Hz-500 Hz (Class 2) 1 m drop test
<b>Safety</b>	EN 61010-1 2nd edition
<b>Altitude</b>	4,000 m; Storage: 12,000 m
<b>EMC</b>	FCC Part 15 Class A, EN 61326-1
<b>Certifications and compliance</b>	CE Conforms to relevant European Union directives
	Conforms to relevant Australian standards
	Listed by the Canadian Standards Association
	FCC Conforms to FCC Rules, Parts 15.107, 15.109

### General

<b>Dimensions</b>	3.5 in x 7.8 in x 1.9 in (8.9 cm x 19.8 cm x 4.8 cm)
<b>Weight</b>	14 oz (0.4 kg)
<b>Battery</b>	Removable, rechargeable lithium-ion battery pack (18.5 Watt-hrs)
<b>Battery life</b>	Typical operating life is 5.5 hours; Typical charge time is 3 hours
<b>External AC adapter/charger</b>	AC input 90 to 264 Vac 48 to 62 Hz input power DC output 15 Vdc at 1.2 amps
<b>Display</b>	2.8 in color LCD (320 x 240 pixels)
<b>Keypad</b>	12-key elastomeric
<b>LEDs</b>	2 LEDs (transmit and link Indicators)
<b>Host interface</b>	USB 5-pin mini-B
<b>Wireless antenna</b>	Internal
<b>External antenna port</b>	Input only; Reverse-polarity SMA connector

### Wireless

<b>Specification compliance</b>	IEEE 802.11a, 11b, 11g, 11n
<b>Operating frequencies</b>	<b>EEE 802.11a ISM Band</b> USA (FCC): 5.15 GHz to 5.25 GHz; 5.725 GHz to 5.850 GHz Europe (ETSI): 5.15 GHz to 5.25 GHz Japan (TELEC): 5.15 GHz to 5.35 GHz; 5.47 GHz to 5.725 GHz
	<b>IEEE 802.11b/g ISM Band</b> USA (FCC): 2.412 GHz to 2.462 GHz (channel 1 to channel 11) Europe (ETSI): 2.412 GHz to 2.472 GHz (channel 1 to channel 13) Japan (TELEC): 2.412 GHz to 2.472 GHz (channel 1 to channel 13)
	<b>IEEE 802.11gn 40 MHz Band</b> USA (FCC): 2.422 GHz to 2.452 GHz Europe (ETSI): 2.422 GHz to 2.462 GHz Japan (TELEC): 2.422 GHz to 2.462 GHz
	<b>IEEE 802.11an 40 MHz Band</b> USA (FCC): 5.15 GHz to 5.25 GHz; 5.725 GHz to 5.850 GHz Europe (ETSI): 5.15 GHz to 5.25 GHz Japan (TELEC): 5.15 GHz to 5.35 GHz; 5.47 GHz to 5.725 GHz
<b>Regulatory domain</b>	World Mode, 802.11d compliant
<b>External uni-directional antenna</b>	Frequency range: 2.4 GHz to 2.5 GHz and 4.9 GHz to 5.9 GHz; Minimum gain: 5.0 dBi in the 2.4 GHz band and 7.0 dBi in the 5 GHz band Connector: Reverse-polarity SMA plug

## Ordering Information

Model	Description
<b>AirCheck</b>	AirCheck Wi-Fi Tester includes: AirCheck tester, USB cable, soft case, Getting Started Guide, and CD with AirCheck Manager software and User Manual
<b>ACK-LRPRO</b>	AirCheck Frontline Troubleshooting Kit with LRPRO includes: AirCheck tester, External uni-directional antenna, USB cable, carrying case, Getting Started Guide, and CD with AirCheck Manager software and User Manual, LinkRunner Pro Standard Kit, and PoE detector.
<b>EXTANT-RPSMA</b>	External uni-directional antenna, RSMA connector
<b>WBP-LION</b>	AirCheck Lithium Ion replacement battery
<b>POE-Detector</b>	Power over Ethernet detector
<b>MS-Auto-Ch</b>	Auto charger
<b>DTX-ACUN</b>	AC charger, universal
<b>GLD-ACK</b>	AirCheck Gold support services, 1 yr

### AirCheck Manager Software

<b>Supported operating systems</b>	Windows Vista; Windows XP; Windows 7
<b>Processor</b>	400 MHz Pentium processor or equivalent (minimum); 1 GHz Pentium processor or equivalent (recommended)
<b>RAM</b>	96 MB (minimum); 256 MB (recommended)
<b>Hard disk</b>	Up to 500 MB of available space may be required
<b>Display</b>	1024 x 768 high color, 32-bit (recommended)
<b>Hardware</b>	USB Port