



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 and misbehaving clients – 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.

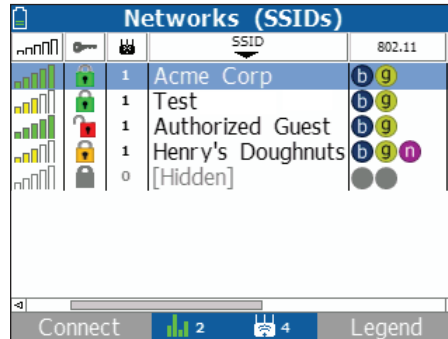
Easy upgrades – The mini-USB port allows software upgrades in the field in just minutes. And with Gold support, you'll automatically receive upgrades at no additional charge.

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:

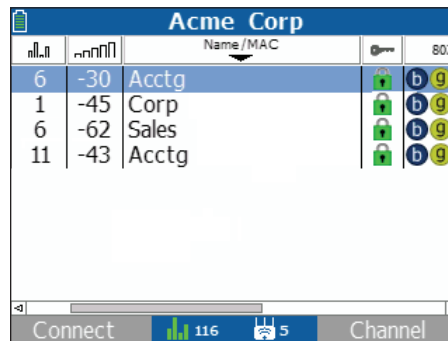
- Signal level
- Security / encryption
- Number of APs in network
- SSID name
- Type of network



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:

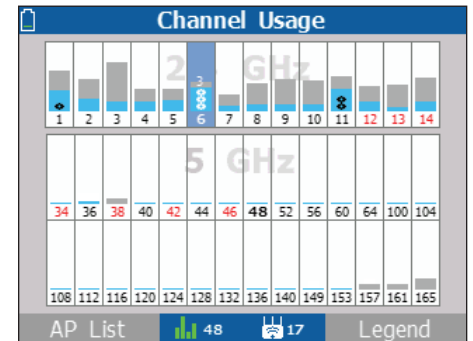
- Channel
- Signal level
- AP name or MAC address
- SSID name (or count of SSIDs for virtual APs)
- Security / encryption
- Type of network



Channel Usage

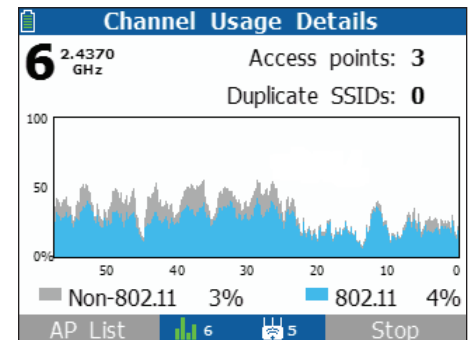
Quickly determine if channels are overloaded due to Wi-Fi traffic (displayed in blue) or interference (displayed in gray). Verify channel-usage pattern or overlap and flag illegal use of channels.

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.



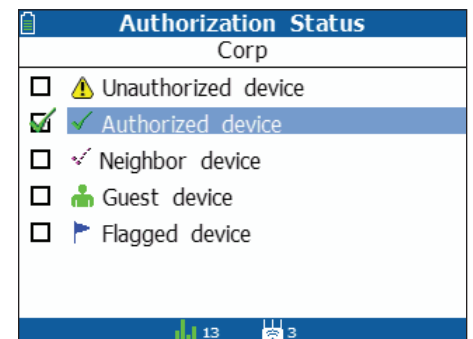
Channel Usage Details

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

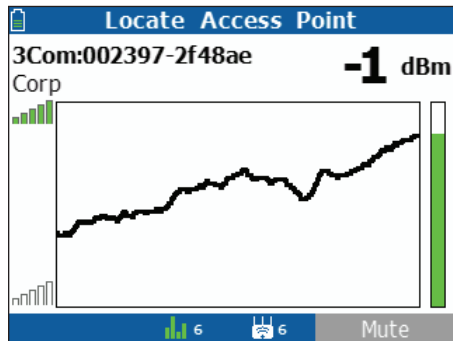
Quickly determine which access points are known and which are not by setting the authorization status for each AP seen by AirCheck. You may also define access control settings in AirCheck Manager and download them in a profile.





Locate Access Points

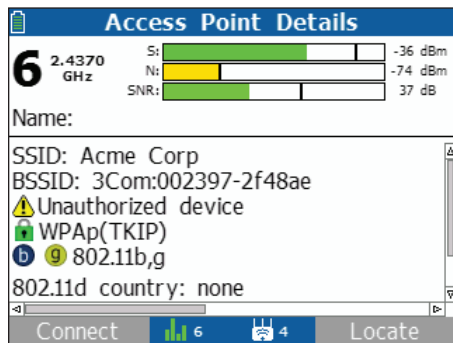
Track down rogue and other APs by graphing the signal strength over time, or by using an audible indication which can be muted.



Access Point Details

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

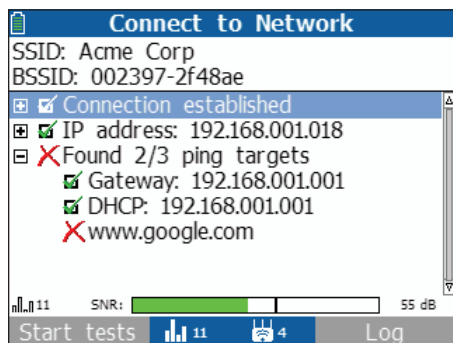
- Signal / noise / signal-to-noise ratio (current and max)
- SSID and BSSID
- ACL status
- Security / encryption



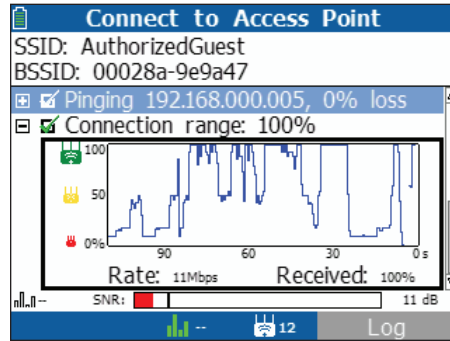
Connect

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

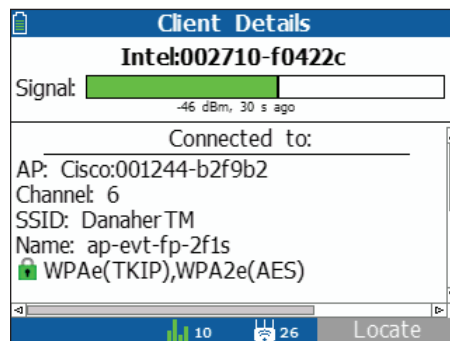


View the process steps on the display and store them in a log for troubleshooting. Quickly test performance and quality of the connection by using the continuous ping response, loss-rate, and connection-range features.



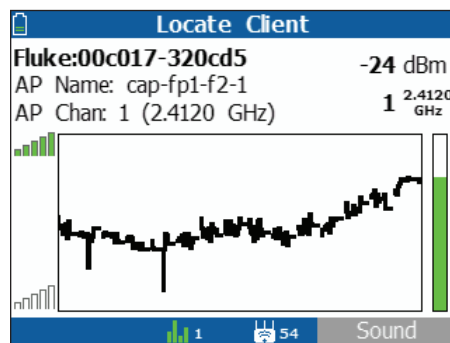
Client Details

Easily find misconfigured or failed client devices. Quickly drill into client details to see signal level, AP MAC and name, channel, SSID, type and determine the channels and frequencies on which the client is probing.



Locate Clients

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



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.

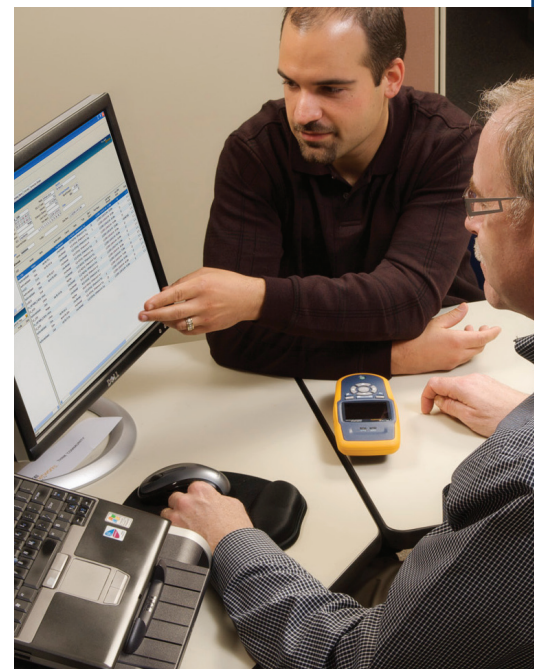
Record Session

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.

AirCheck Manager Software





Technical Specifications

Environmental

Operating temperature and relative humidity	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 113°F (45°C)
Operating relative humidity (% RH without condensation)	90% (50°F to 95°F; 10°C to 35°C) 75% (95°F to 113°F; 35°C to 45°C)
Storage temperature	-4°F to 140°F (-20°C to +60°C)
Shock and vibration	Random, 2 g, 5 Hz-500 Hz (Class 2) 1 m drop test
Safety	EN 61010-1 2nd edition
Altitude	4,000 m; Storage: 12,000 m
EMC	FCC Part 15 Class A, EN 61326-1
Certifications and compliance	CE Conforms to relevant European Union directives
	Conforms to relevant Australian standards
	Listed by the Canadian Standards Association
	FC Conforms to FCC Rules, Parts 15.107, 15.109

Wireless

Specification compliance	IEEE 802.11a, 11b, 11g, 11n
Receive Channel Frequencies	2.4 GHz Band* 2412-2484 MHz (Channel 1 to Channel 14)
	5 GHz Band* 5170-5320 MHz, 5500-5700 MHz, 5745-5825 MHz (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)
*Notes: 1. AirCheck receives on all of these frequencies in every country. 2. These are the center frequencies of the channels that AirCheck supports.	
Transmit Channel Frequencies	2.4 GHz Band** • 802.11b 2412-2484 MHz (Channel 1 to Channel 14) • 802.11 g/n 20 MHz BW (HT20) 2412-2472 MHz (Channel 1 to Channel 13) • 802.11n 40 MHz BW (HT40) 2422-2462 MHz (All legal bonded channel pair combinations)
	5 GHz Band** • 802.11 a /n 20 MHz BW (HT20) 5180-5320 MHz, 5500-5700 MHz, 5745-5825 MHz (Channels 36, 40, 44, 48, 52, 56, 60, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165) • 802.11 n 40 MHz BW (HT40) 5190-5310 MHz, 5510-5670 MHz, 5755-5795 MHz (All legal bonded channel pair combinations)
**Notes: 1. AirCheck transmits only on frequencies allowed in the country where it operates. 2. These are the center frequencies of the channels that AirCheck supports.	
Regulatory domain	World Mode, 802.11d compliant
External uni-directional antenna	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

AirCheck does not support mesh/bridge APs

AirCheck Manager Software

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

General

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

Ordering Information

Model	Description
AirCheck 	AirCheck Wi-Fi Tester includes: AirCheck tester, USB cable, soft case, Getting Started Guide, and CD with AirCheck Manager software and User Manual
ACK-LRPRO 	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.
AIRCHECK-5PK*	AirCheck 5 Pack: includes five (5) AirCheck testers and five (5) free external directional antennas
AIRCHECK-10PK*	AirCheck 10 pack: includes a bonus free AirCheck tester, so you receive 11 AirCheck testers, and 11 free directional antennas
ACK-LRPRO-10PK*	AirCheck Frontline Troubleshooting Kit 10 pack: includes a bonus free Kit, so you receive 11 ACK-LRPROs
EXTANT-RPSMA	External uni-directional antenna, RSMA connector
WBP-LION	AirCheck Lithium Ion replacement battery
POE-Detector	Power over Ethernet detector
MS-Auto-Ch	Auto charger
DTX-ACUN	AC charger, universal
GLD-ACK	AirCheck Gold support services, 1 yr

*These bundles are only available in the US and Canada

Fluke Networks

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Fluke Networks operates in more than 50 countries worldwide. To find your local office contact details, go to www.flukenetworks.com/contact.

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