

# OneTouch AT G2 And 10G Network Assistant

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## Reduce network troubleshooting time

More than 70% of IT organizations lack standardized processes to validate deployment and solve problems. This results in more than 1 hour (average) to resolve problems. In addition, 40% of IT tickets are not solved the first time and require escalation. Intermittent problems can take twice as long to resolve.

By automating and standardizing the validation and troubleshooting process, the OneTouch™ AT Network Assistant empowers novice network technicians to validate performance easily, solve more problems faster, and escalate issues more efficiently—allowing more IT projects to be completed on time.

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Empower IT professional teams to effectively validate, and troubleshoot Ethernet and Wi-Fi access networks

- **Standardize:**
- **Authoritative:**
- **Visibility:**
- **Collaborative:**
- **VoIP ready:**
- **Capture friendly:**
- **Centralized Management:**

- **All-in-one:**
- **Versatile:**

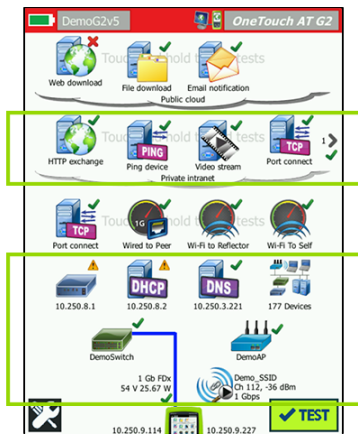
OneTouch AT features

**Versatile copper, fiber and Wi-Fi troubleshooting**

**All-in-one testing from the patch cable & Wi-Fi to the cloud**

**Standardized network validation and troubleshooting**

**Automated suite of tests with pass/fail analysis**



### User-Defined Performance Tests

Connectivity and response time test to application/servers, and performance test to end-point(s) in all three network layers: the local broadcast domain, the private intranet and the public cloud (internet).

### Client Network Analysis

Cable and nearest switch test, Wi-Fi network accessibility test, Wired and Wi-Fi access network/device discovery & network service tests: DHCP & DNS & 802.1x

Figure 1. The AutoTest provides a comprehensive measurement of network performance from the end user point-of-view, from cable, to services and applications (Test result from OneTouch AT with G2 Modules for both Wired and Wi-Fi network shown)

## Centralized cloud-based management

## Centralized report management

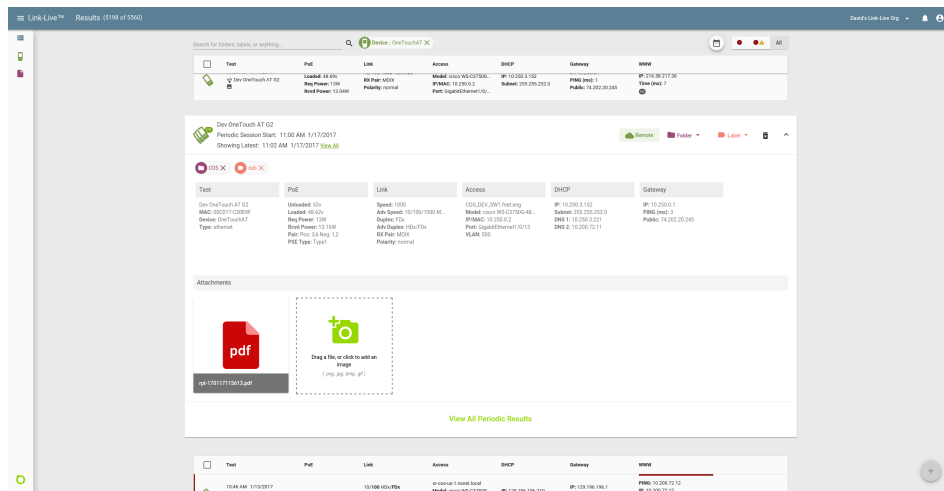


Figure 2. Link-Live consolidates test results from OneTouch AT

## Remote visibility, control and file access

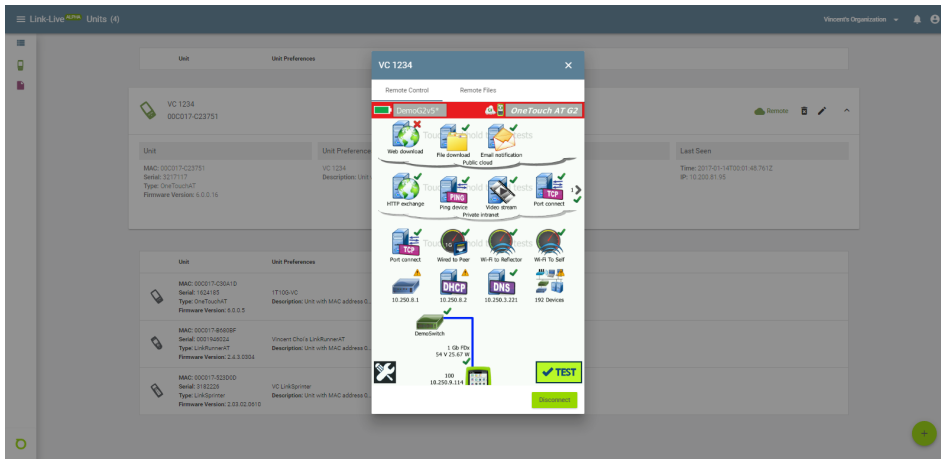


Figure 3A. Remotely control the OneTouch AT and access saved results using a Laptop, or tablet

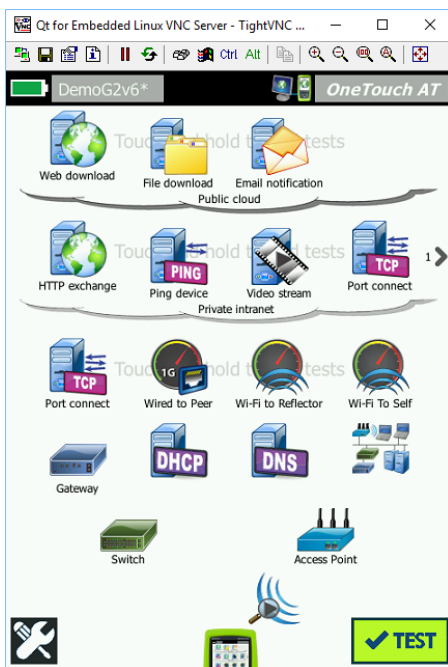


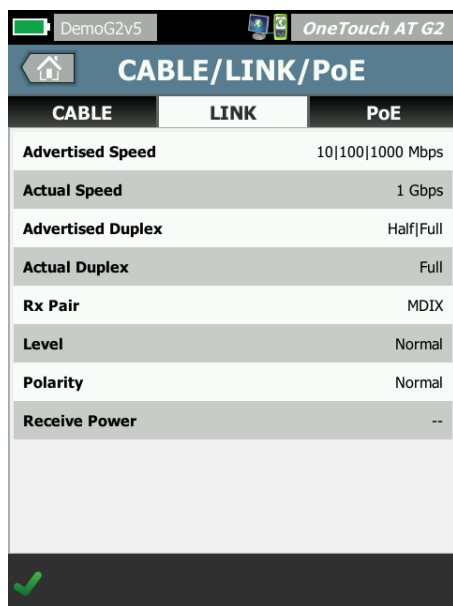
Figure 3B. Remotely control the OneTouch AT through VNC client (TightVNC Viewer shown)

## Test Features

Copper and fiber-optic cable testing (Supported with OneTouch AT G2 module)

PoE testing (Supported with OneTouch AT G2 Module)

Wi-Fi and wired client devices connectivity testing

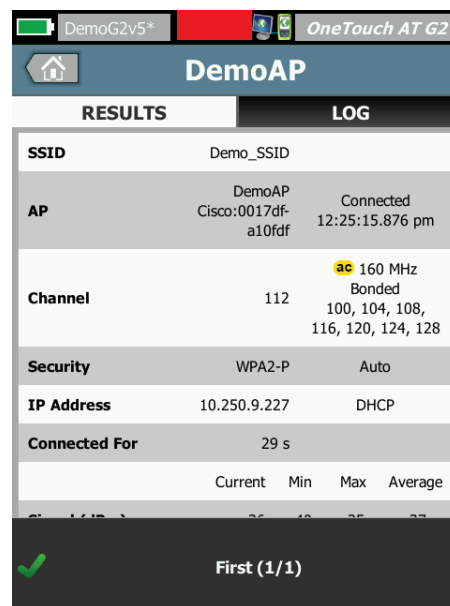


The screenshot shows the 'CABLE/LINK/PoE' test results on the OneTouch AT G2 interface. The interface has a status bar at the top with 'DemoG2v5' and 'OneTouch AT G2'. Below the title bar, there are three tabs: 'CABLE', 'LINK', and 'PoE'. The 'LINK' tab is selected. The results are displayed in a table with the following data:

CABLE	LINK	PoE
Advertised Speed	10 100 1000 Mbps	
Actual Speed	1 Gbps	
Advertised Duplex	Half/Full	
Actual Duplex	Full	
Rx Pair	MDIX	
Level	Normal	
Polarity	Normal	
Receive Power	--	

A green checkmark is visible at the bottom left of the screen.

Figure 4. Test link speed over twisted pair and fiber-optic links at rates up to 1 Gbps and measure PoE voltage with the G2 Module



The screenshot shows the 'DemoAP' test results on the OneTouch AT G2 interface. The interface has a status bar at the top with 'DemoG2v5\*' and 'OneTouch AT G2'. Below the title bar, there are two tabs: 'RESULTS' and 'LOG'. The 'RESULTS' tab is selected. The results are displayed in a table with the following data:

RESULTS	LOG
SSID	Demo_SSID
AP	DemoAP Cisco:0017df-a10fdf Connected 12:25:15.876 pm
Channel	112 160 MHz Bonded 100, 104, 108, 116, 120, 124, 128
Security	WPA2-P Auto
IP Address	10.250.9.227 DHCP
Connected For	29 s
	Current Min Max Average

A green checkmark is visible at the bottom left of the screen. At the bottom, it says 'First (1/1)'.

Figure 5. Test a Wi-Fi connection at up to 802.11ac rates and verify channel width, signal and noise level

## Network services testing



Figure 6. Detailed breakdown of DHCP provisioning and response performance

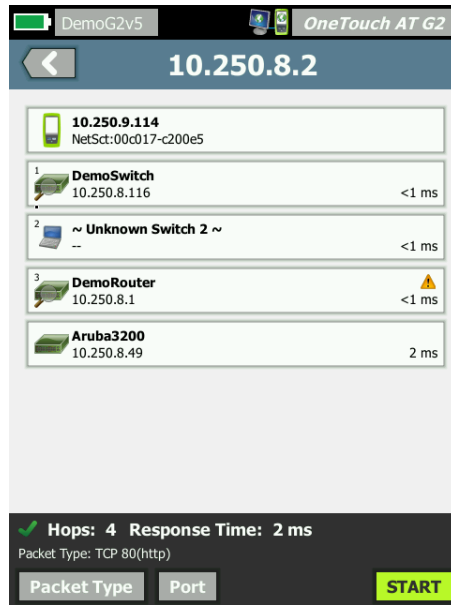


Figure 7. Path Analysis showing the path through switches from OneTouch AT to a client

## Network application testing

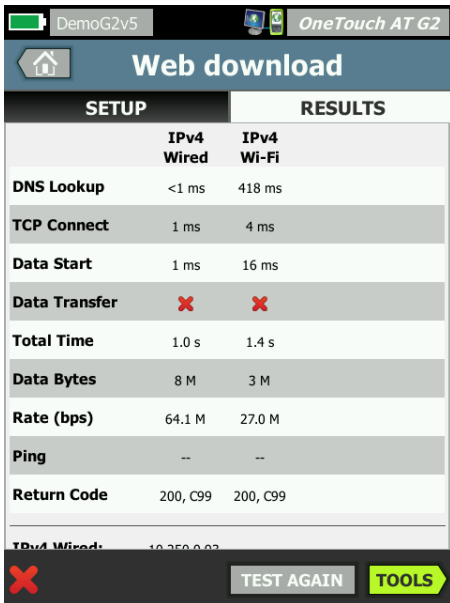


Figure 8. Detailed breakdown of network-hosted application performance



Figure 9. Group tests by hosting location – local, intranet, internet

## Local, intranet and internet performance

Enterprise network managers use the Wired Performance tests for:

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Service providers and system integrators use the Wired Performance tests for:

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## 1G and Wi-Fi End-to-end path performance measurement

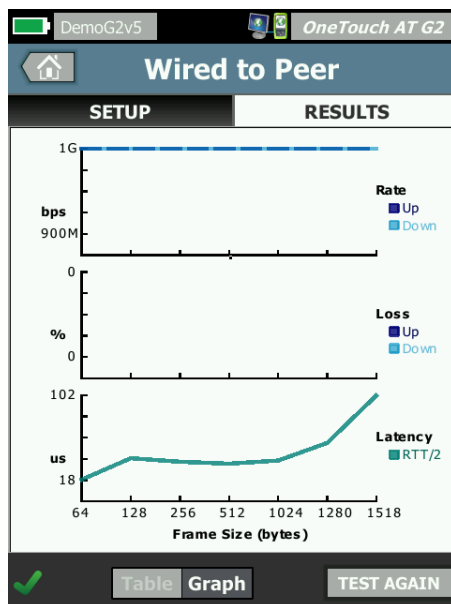


Figure 10. End-to-end path performance measurement validates link readiness and SLA compliance



OneTouch AT G2



LinkRunner AT



OneTouch AT G2

Remote Tester (End-Point)		
OneTouch AT G2 as local	LinkRunner AT 2000	OneTouch AT G2 (wired)

10G End-to-end path performance measurement



Demo10Gv5 OneTouch AT 10G

### XG Custom Perf.

SETUP	RESULTS	
Config Test:	Passed	
OneTouch AT 10G Service	Upstream	Downstream
Requested Rate (ULR)	10 G	10 G
Requested Rate (IR)	10 G	10 G
Throughput (IR)	10 G	10 G
Frame Loss	0 (0%)	0 (0%)
Latency	<1 ms	<1 ms
Jitter	<0.01 ms	<0.01 ms

TEST AGAIN

Figure 11. Detailed breakdown of XG custom performance

DemoG2v5 OneTouch AT G2

### Wired to Peer

SETUP	RESULTS	
<b>64 Bytes</b>		
Target Rate (bps)	1 G	1 G
Throughput (bps)	988.65 M	992.07 M
Frames Sent	2.95 M	2.98 M
Frames Recvd	2.95 M	2.95 M
Frames Lost	0	0
Latency	<1 ms	<1 ms
Jitter	10.71 us	10.71 us
<b>128 Bytes</b>		
Target Rate (bps)	1 G	1 G

Table Graph TEST AGAIN

Figure 12. Detailed breakdown of wired to peer





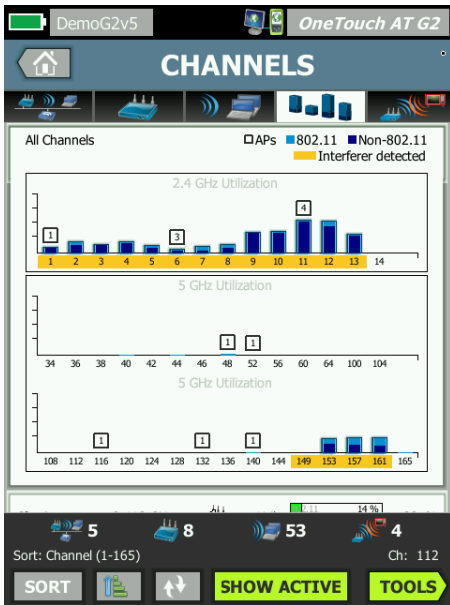


Figure 13. Analyze Wi-Fi health by each available channels



Figure 14. Visibility into each Wi-Fi channel, showing bandwidth occupied by 802.11 and non-802.11 traffic

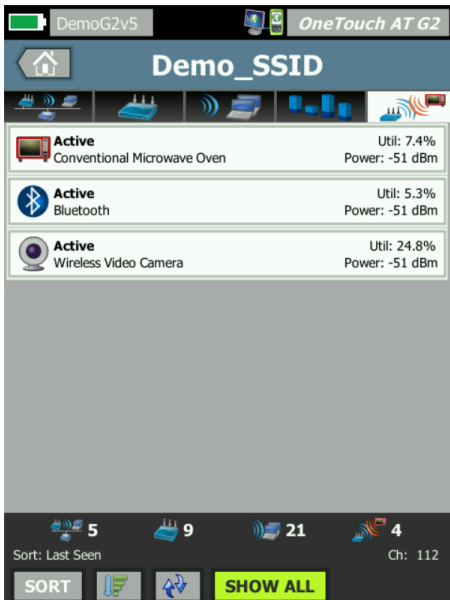


Figure 15. Unique Interferer analysis classifies sources of non-802.11

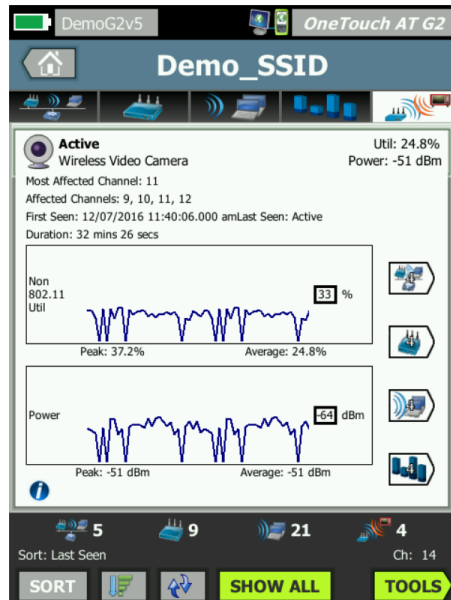


Figure 16. Detailed information about a specific interference source

Inline VoIP analysis (Supported by OneTouch AT G2 Module only)

	Port A	Port B
Speed/Duplex	100 Mbps Full	100 Mbps Full
Advertised Speed	10 100 1000 Mbps	10 100 Mbps
Advertised Duplex	Half Full	Half Full
Bytes	257,573	2,494
Packets	2,909	10
Multicasts	1,069	3
Broadcasts	1,804	5
FCS Errors	--	--
Undersize Frames	--	--

PoE Power: 0.92 W (45 V @ 20 mA, +:3,6 -:1,2)

Figure 17. Inline VoIP analysis simplifies troubleshooting of desktop VoIP problems in real-time without TAPs or switch mirror ports

Time	Event
2:22:06.000 pm	Listening for VoIP traffic... 010.250.008.116 Name: GS110TP_Archer
2:22:08.000 pm	Cisco:001e13-6c3a3c Name: SEP001E136C3A3C Model: Cisco IP Phone 7941 Port: Port 1
1:18:22.000 pm	Cisco:001e13-6c3a3c DHCP Request: 10.250.0.180
1:18:22.000 pm	0.0.0.0 DHCP NACK: from 10.250.0.2

PoE Power: 0.92 W (45 V @ 20 mA, +:3,6 -:1,2)

Figure 18. VoIP Analysis shows the entire call setup process as well as quality of the VoIP call in each direction

## Packet capture

### Inline Mode

- FDX Aggregation
- Passes and Measures PoE

Figure 19. Inline packet capture simplifies documentation of client application problems without TAPs or SPAN ports

Standalone Capture	
Connection: Inline	>
Port A Filter: None	>
Port B Filter: None	>
Speed/Duplex: Auto	>
File Size Limit: 2 GB	>
Frame Slice Size: 9600 B	>
AutoTest Capture	
Enable	<input type="checkbox"/> On <input checked="" type="checkbox"/> Off

Figure 20. Capture packets to solve complex issues

# Streamline collaboration

## Save test results

## Setup wizard

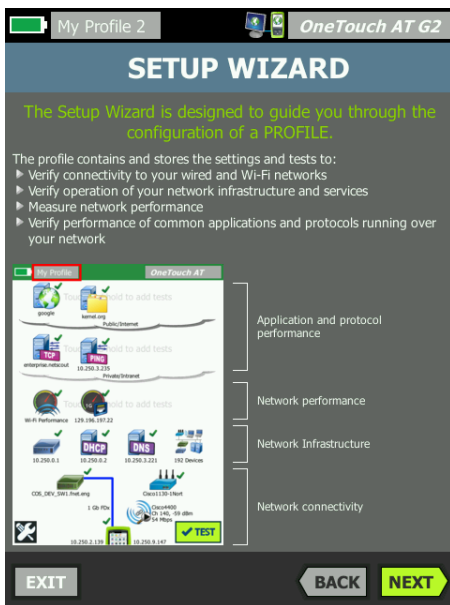


Figure 21. Setup Wizard simplifies creation of AutoTest profiles

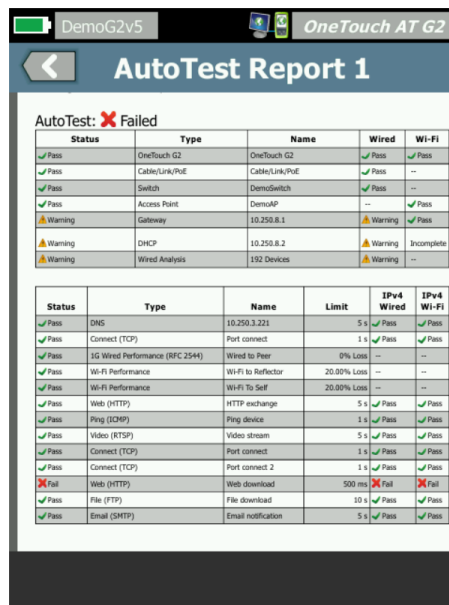


Figure 22. Detailed breakdown of network service performance

## Purpose-built for use by field team

## Gold Support

# Technical Specifications

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## GENERAL

**Dimensions (with module and battery installed)**

**Weight (with module and battery installed)**

**Display**

**AC adapter**

**Battery type**

**Battery life**

**Memory**

**Management port**

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## G2 MODULE NETWORK INTERFACES

**Network analysis ports**

**Wi-Fi adapter data rate**

**Wi-Fi adapter operating frequency**

**Wi-Fi security**

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## 10G MODULE NETWORK INTERFACES

**Network analysis ports**

**Management port**

**Supported network standards**

**RFCs and standard MIBs used**

Note: The OneTouch AT analyzer is NOT designed for connection to a telephone network, ISDN line. Do not connect to a telephone network or ISDN line except through a regulatory agency compliant computer network modem device.

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## COPPER CABLES TEST

### Cable types

### Cable length measurement

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## ENVIRONMENTAL AND REGULATORY

### Operating temperature

### Battery charging temperature

### Storage temperature

### Operating relative humidity (% RH without condensation)

### Shock and vibration

### Safety

### Operating altitude

### Storage altitude

### Pollution degree

### EMC

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## CERTIFICATIONS AND COMPLIANCE



Mainframes	
Model	Description





