

Measuring Quality of Service from the Customer Premises

Epitiro's AT100 hardware probe is designed to measure broadband Quality of Service (QoS) indicators directly from customer premises, clearly identifying issues in the local loop, last mile and customer premises equipment – those 'difficult to access' parts of the network that are the source of many customer-affecting problems.

The AT100 hardware device, easily installed and activated, enables telcos, regulators, ISPs and enterprises to have end-to-end network QoS performance reporting directly from the home or business gateway.

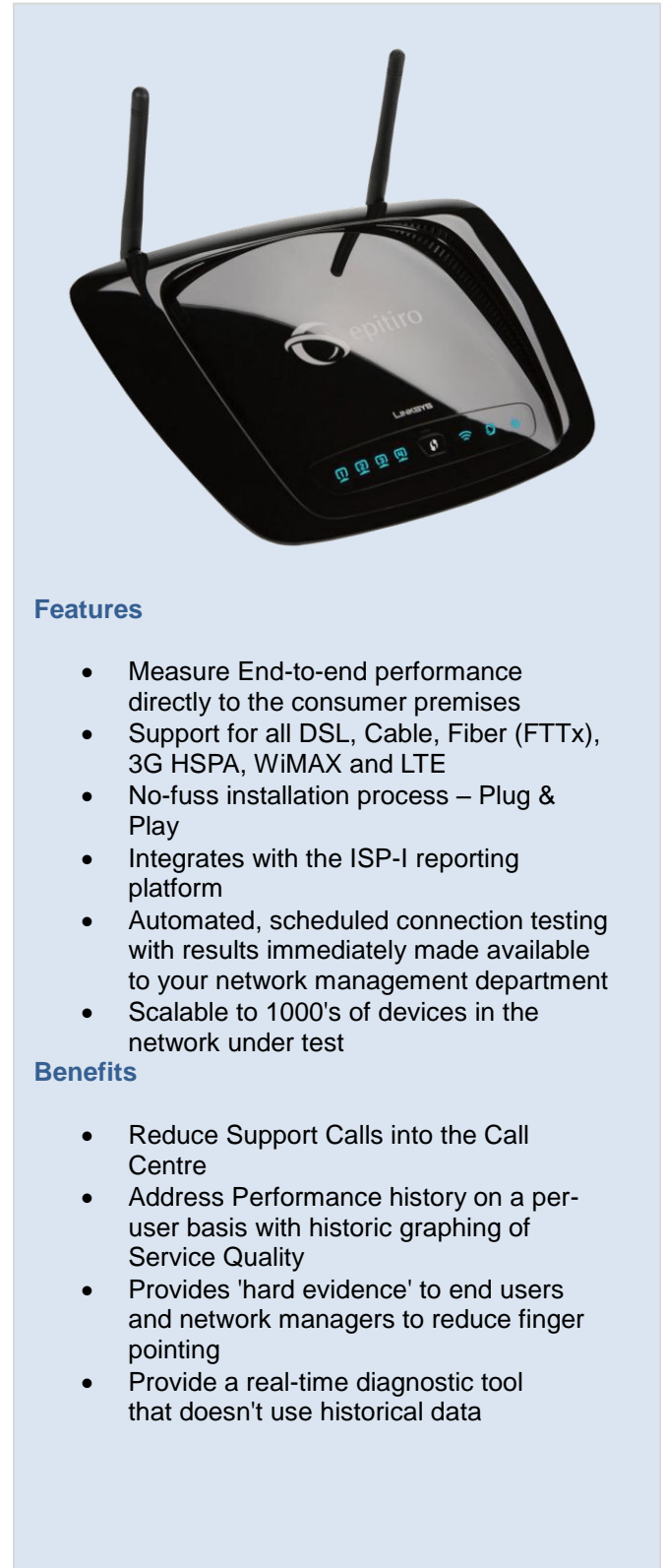
Under the control of Epitiro's flagship ISP-I Management Platform, the AT100 hardware probes perform a remotely-configurable suite of real-time tests to help identify "last-mile", access network issues and also identify potential CPE configuration or LAN configuration issues.

The AT100 tests without any negative impact to the end user's service, enabling your network managers to test the network right to the edge, with real-data, in a real environment, 24x7x365.

Operational Overview

The AT 100 test script can be configured to perform the following tasks:

- TCP or UDP based point-to-point 'Up To' speed tests to end-point servers (managed by Epitiro) off-net or on-net
- HTTP cached and un-cached downloads across the network (into the core or national/international off-net locations)
- Network Latency: ICMP-based echo request packets are sent to target host(s) in the core network or off-net. Round-trip time is measured with the minimum, mean, max and standard deviation calculated. Packet loss is also measured during the test
- DNS Performance metrics
- Additional bespoke testing engineered by arrangement



Features

- Measure End-to-end performance directly to the consumer premises
- Support for all DSL, Cable, Fiber (FTTx), 3G HSPA, WiMAX and LTE
- No-fuss installation process – Plug & Play
- Integrates with the ISP-I reporting platform
- Automated, scheduled connection testing with results immediately made available to your network management department
- Scalable to 1000's of devices in the network under test

Benefits

- Reduce Support Calls into the Call Centre
- Address Performance history on a per-user basis with historic graphing of Service Quality
- Provides 'hard evidence' to end users and network managers to reduce finger pointing
- Provide a real-time diagnostic tool that doesn't use historical data

Tests can be scheduled to run at various times of the day – typically peak and off-peak – to provide a rich database of metrics that can be analysed using the ISP-I reporting dashboard. Before performing any configured test the AT100 confirms there is no network traffic load which not only ensures valid test results, it means end users are not affected by any background test.

A silent background mechanism automatically updates the AT100 so that new software releases and support for additional functionality and network protocols can easily be deployed.

Reporting and Data Recording Mechanisms

The AT100 reports test results to ISP-I central (Epiro-managed) control servers on a configurable schedule, using secure HTTP-based transportation. Communication of configuration, results and software updates between the AT100 and the control centre servers uses MD5 encryption to ensure this secure transmission of data.

Epiro provide an extremely flexible reporting interface, via the ISP-I platform, and can additionally

develop a customized reporting specifically to further meet the client's reporting requirements. All results are stored in real-time in a server-side SQL database.

Installation

The AT100 is easy to install at the customer premises. It connects to an unused Ethernet port on the customer's gateway or router and auto-configures on power-up. To configure the AT100 for testing during idle times only, wired LAN devices connected to the existing router are re-assigned to the AT-100 where it auto-checks for network traffic. Wireless PCs at the customer premises continue to connect to the existing router.



The AT100 operates silently and takes up very little space – ideal for installation beside the home router/modem

Specifications

Device Type:	AT100 Broadband Probe
Physical Dimensions:	175 x 130 x 35 mm (6.89 x 5.12 x 1.38 in)
Weight:	0.33 kg (11 oz)
Networking	
Remote Management Protocol:	MD5 Encrypted HTTP
Status Indicators:	Port status, link activity, power
Expansion / Connectivity	
Interfaces:	1 x gigabit internet port 4 x gigabit ethernet ports
Cables (Details):	1 x network cable
Compliant Standards:	CE, IC CS-03, FCC
Power	
Power Device:	Power adapter Localised to country of deployment – external, 110V-240v, 100 mA, 12VDC 1A operating voltage.
Environmental Parameters	
Min Operating Temperature:	32 °F
Max Operating Temperature:	104 °F
Operating Humidity Range :	10 - 85%

Please contact us directly to learn more about the **AT100**.

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