L I T E P O I N T

IQflex *802.11a/b/g WLAN Manufacturing Test Solution*

Improve test quality ... while increasing throughput

The LitePoint IQflex™ one-box tester (OBT) is an all-in-one customizable manufacturing test instrument, designed specifically to meet all the needs of 802.11a/b/g WLAN production test and optional Bluetooth®. Built on the industry proven IQview® platform, the IQflex tester ensures high consistency production tests, while minimizing manufacturing cost.

The rack mountable IQflex test instrument integrates the functionality of a power meter and a spectrum analyzer with a vector signal analyzer (VSA) and a vector signal generator (VSG). The IQflex instrument includes the latest vector-based signal analysis and modulation software technology. Easily integrated into an automated test program, IQflex provides fast pass/fail or parametric test results.

Breaking the Cost Barrier, Replacing Golden Unit Testing

IQflex breaks the cost barrier of high volume manufacturing testing by introducing a cost effective, high quality test solution exceeding 802.11 WLAN RF and EVM standards specifications.

Receiver sensitivity test accuracy is often compromised by a distorted RF signal source. Improved production yields are achieved by replacing the imperfect golden unit RF source with the near perfect RF source from IQflex.

Unavailable on golden unit test solutions, EVM is a fast, accurate and reliable measure for the modulation quality of a transmitter, and is superior to transmit PER measurements.

When comparing multiple manufacturing line test set-ups using IQflex and golden unit methodologies, IQflex will produce more consistent test results with less measurement drift over time and over temperature.

Reducing the Time from R&D to Manufacturing

IQflex offers an extensive range of preprogrammed test features accessible through a flexible software interface (API). Data compatibility between IQview and IQflex ensures consistency in test results and analysis through the entire product development lifecycle.

Future-proof Investment

The IQflex test solution evolves with your increasingly stringent testing requirements. Future-proof software upgrades ensure compliance with WLAN standards changes. Incorporating high signal bandwidth design techniques, IQflex anticipates higher data rate standards. Worldwide WLAN dual band frequency coverage and flexible modulation options ensure IQflex hardware will meet your needs for years to come.

- **Truly one-box tester (OBT) solution** – IQflex includes the functionality of VSA, VSG, power meter, spectrum analyzer, RF switches and RF attenuators.

- **Improved yields** – Accurate and consistent measurements allow tighter test limits, reduced product retest and improved manufacturing line capacity with increased outgoing product quality levels.

- **Independent simultaneous Rx and Tx measurements** – With the optional dual test head capability, IQflex decreases effective overall test time for optimum factory throughput.

- **Easy to use** – Visual C++® DLL automated test program interface reduces test engineering resources during test development.

- **Customizable** – IQflex is a test solution based on an 802.11 platform design, which is customizable to the unique needs of the high volume manufacturer.
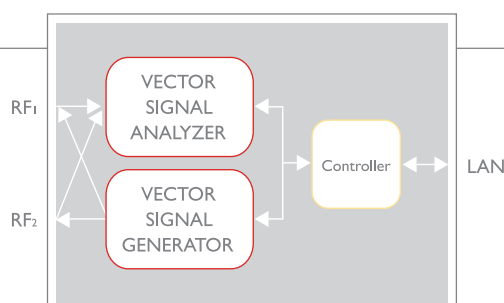
The Complete IQflex 802.11a/b/g
WLAN Manufacturing Test Solution

IQflex Test Features & Functions

- Independent Rx & Tx Measurements
- Tx Carrier Freq
- Tx Output Power
- Tx Output Power Variation
- Tx Ramp-up and Ramp-dn Time
- Tx 1st and 2nd Side Lobes
- Tx Spectrum

- Tx EVM – replacing Tx PER
- Rx Sensitivity
- Rx Max Input Level
- Rx PER
- Tx Power vs. EVM
- Antenna Diversity

IQflex Specifications Overview

Frequency Bands		2.4 - 2.5GHz
		4.9 - 6.0GHz
RF Output Power	2.4 GHz Band	-10 to -90dBm
	5 GHz Band	-10 to -90dBm
RF Input Range	2.4 GHz Band	+20 to -70dBm
	5 GHz Band	+20 to -70dBm
EVM Accuracy		
RF Input	2.4 GHz Band	-36dB EVM
	5 GHz Band	-36dB EVM
RF Output	2.4 GHz Band	Better than -36dB EVM
	5 GHz Band	Better than -36dB EVM

RF1

RF2

VECTOR SIGNAL ANALYZER

VECTOR SIGNAL GENERATOR

Controller

LAN

IQflex is a vector signal-based manufacturing test solution, integrating both a VSG and VSA in a single unit. Two RF ports and an advanced switch matrix eliminates the need for external switching.

IQflex Integrated Components

Programmable RF Switches	Built-in
Programmable Attenuators	Built-In
Spectrum Analyzer	Not needed
RF Power Meter	Built-In

MiMo Ready &
optional Bluetooth functionality!

Our commitment is to serve our customers' long-term technology and strategic needs.

LitePoint Corporation designs and markets innovative, dedicated test instrument solutions for existing high volume and emerging wireless products markets, such as IEEE 802.11 WLAN, IEEE 802.15.3a (WiMedia™), IEEE 802.16 (WiMAX®), and Bluetooth®. LitePoint solutions are designed specifically to simplify and accelerate standards compliance and performance tests.

Demo IQflex Today!
- Online - go to www.litepoint.com/demos/
- Live WebEx - go to www.litepoint.com/demos/webex/
- In person - call your local rep for an appointment

LITEPOINT