

MODEL MP5000

Introduction

The MP5000 deploys state-of-the-art Software Defined Radio (SDR) architecture that consists of full extendibility to all current and future Wi-Fi / Bluetooth standards. By upgrading firmware and hardware, it will be capable to support LTE and other wireless standards in the future.

The MP5000 contains high quality VSA (Vector Signal Analyzer) & VSG (Vector Signal Generator) to provide a complete and versatile test environment. A highly integrated GUI is both intuitive and user-friendly which can run simple test of Wi-Fi / Bluetooth signal within few clicks. Supported measurement items include EVM, power, frequency error, IQ imbalance, 20dB Bandwidth, FM Demodulator Output, etc.

The MP5000 comes fully programmed test waveforms for Wi-Fi 802.11a/b/g/n/ac & Bluetooth V.1.x/2.x/3.x EDR/4.x BLE which allows immediate testing for DUTs. Moreover, a built-in waveform generator utility let users being to establish arbitrary Wi-Fi / Bluetooth testing signals. Automatic mass production turnkey software is also available upon request.

Features

- Software Defined Radio architecture easy extending to future wireless standards
- Wi-Fi 802.11a/b/g/n/ac
- Bluetooth v1.x/v2.x/v3.x/v4.x/v5.0
- Zigbee
- User friendly GUI for R&D/QA applications
- API for production automation programming
- Turn-key production automation software support upon request

ADIVIC
— RF TEST & MEASUREMENT —

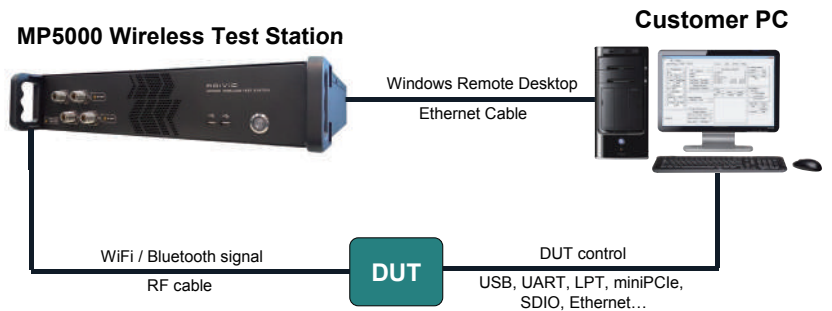
Copyright © 2007 ADIVIC Technology Corporation. All rights reserved.
All company and product names are trademarks or registered trademarks of their respective manufactures.
ADIVIC Technology Corporation reserves the right to change without notice
9F., No. 88, Wenmao Rd., Guishan Dist., Taoyuan City 333001, Taiwan
TEL: 886-3-327-9968
Web: www.adivic.com

Wireless Test Station



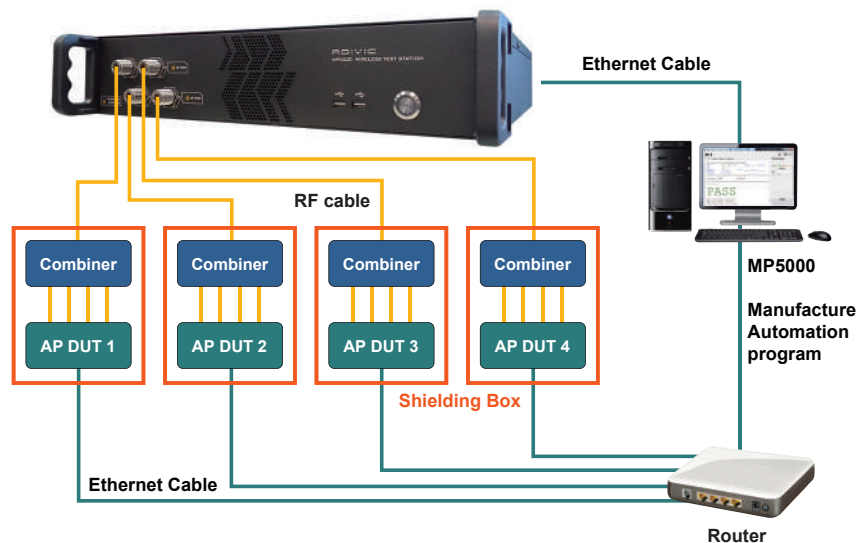
MP5000 R&D Graphic Program

MP5000 Full Test Setup for R&D/QA



GUI application runs on the MP5000 Tester
Manage the GUI application thru Windows Remote Desktop
No need to install additional software package into your PC/NB

MP5000 WLAN Tester



MP5000 General Technical Specifications

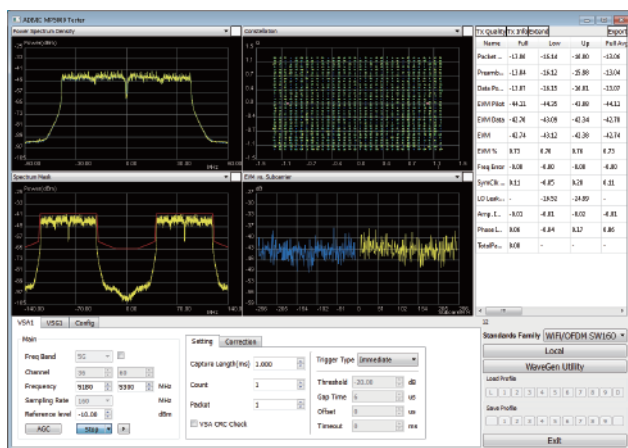
>> RF Analyzer

Parameter	Specifications
Input Frequency Range	2150~2600 MHz, 4900~6000 MHz optional 10MHz~6GHz full band
RF Port number	4 Ports
IF bandwidth	120 MHz
Max input power	+30 dBm peak, +20 dBm average
Input power accuracy @(+20 to -75 dBm)	+/-0.75 dB (+/-0.5 dB Typ) +/-1.0 dB@ 0°C ~ 50°C
Phase Noise	Phase noise < -100dBc: 1 KHz offset @2.4 GHz Phase noise < -95dBc: 1 KHz offset @5.8 GHz
LO Leakage (after self-calibration)	< -50 dBc
sideband image (IQ-imbalance) @after self-calibration	< -50dBc @ 2.4GHz, -10dBm < -50dBc @ 5.8GHz, -10dBm
Third order input inter-modulation distortion(IMD3)	< -70dBc@-10 dBm
Input Return loss	> 10 dB 2150~2600 MHz > 12 dB 4900~6000 MHz
ADC resolution	16 Bits
Sample rate	160 MS/s
Initial achievable accuracy	+/-50 ppb maximum (OCXO) @25 °C, after 60 minutes warm up
Temperature stability	+/-20 ppb maximum(OCXO) @ 0°C ~ 50°C
Aging	+/-1 ppb / day maximum (OCXO) +/-100 ppb / yr maximum (OCXO)
Operating Temperature	0 °C to 50 °C
Operating Voltage	100 V to 240 V
Warm-up time	> 30 minute

>> RF Generator

Parameter	Specifications
Output Frequency Range	2150~2600 MHz, 4900~6000 MHz optional 10MHz~6GHz full band
IF bandwidth	120 MHz
Max Output power@ CW	+10 dBm @ 2150~2600 MHz +7 dBm @ 4900 ~ 6000 MHz
Power Accuracy@(0 to -95 dBm)	+/-0.75 dB (+/-0.5 dB Typ) +/-1.0 dB @ 0 °C ~ 50 °C
Phase Noise	Phase noise < -100 dBc: 1 KHz offset @ 2.4 GHz Phase noise < -95 dBc: 1 KHz offset @ 5.8 GHz
LO leakage(DC offset) @after self-calibration	< -50 dBc @ 2.4 GHz, -10 dBm < -50 dBc @ 5.8 GHz, -10 dBm
sideband image (IQ-imbalance) @after self-calibration	< -50 dBc @ 2.4 GHz, -10 dBm < -50 dBc @ 5.8 GHz, -10 dBm
Third order inter-modulation distortion(IMD3)	< -60dBc@-10dBm(two -13dBm Tone)
Return loss	> 10 dB 2150 ~ 2600 MHz > 12 dB 4900 ~ 6000 MHz
DAC resolution	16 Bits
Sample rate	960 MS/s
Initial achievable accuracy	+/- 50 ppb maximum (OCXO) @ 25 °C, after 60 minutes warm up
Temperature stability	+/- 20 ppb maximum (OCXO) @ 0 °C ~ 50 °C
Aging	+/-1 ppb / day maximum (OCXO) +/-100 ppb / yr maximum (OCXO)
Operating Temperature	0 °C to 50 °C
Operating Voltage	100 V to 240 V
Warm-up time	> 30 minute

MP5000 GUI outlook (Wi-Fi)



MP5000 automated mass-production turnkey software

