MODEL MP5000

Introduction

The MP5000 deploys state-of-the-art Software Designed 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.

MP5500 comes with fully programmed test waveforms for Wi-Fi 802.11a/b/g/n/ac & Bluetooth V.1.x/2.x/3.x EDR/4.xBLE/5.0 allowing immediate testing for DUTs. Moreover, a built-in waveform generator utility allows users to establish arbitrary Wi-Fi / Bluetooth test signals. Automatic mass production turnkey software is also available upon request.

Features

- Software defined radio architecture of extensibility to future wireless standards
- Wi-Fi 802.11 ac/ax, a/b/g/n, p/af/ah
- Bluetooth v1.x/v2.x/v3.x/v4.x/v5.0
- Zigbee/Z-Wave/DECT
- User friendly GUI for R&D/QA applications
- API for production automation programming
- Turn-key production automation software support upon request

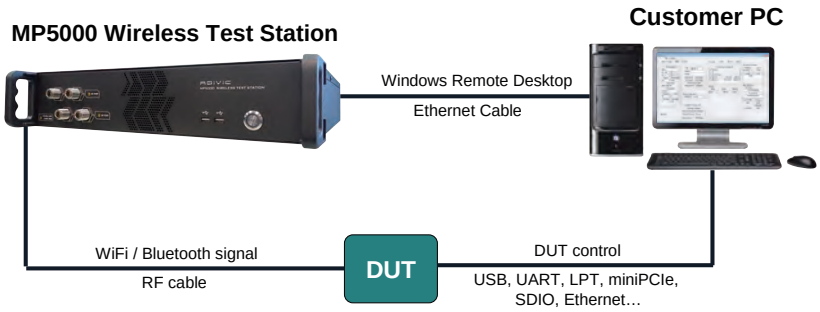
ADIVIC
RF Test & Measurement

6F., No.345, Xinhu 2nd Rd., Neihu Dist., Taipei City 114, Taiwan
TEL: +886 2 2791 1718 FAX: +886 2 2791 1887 www.adivic.com

Wireless Test Station

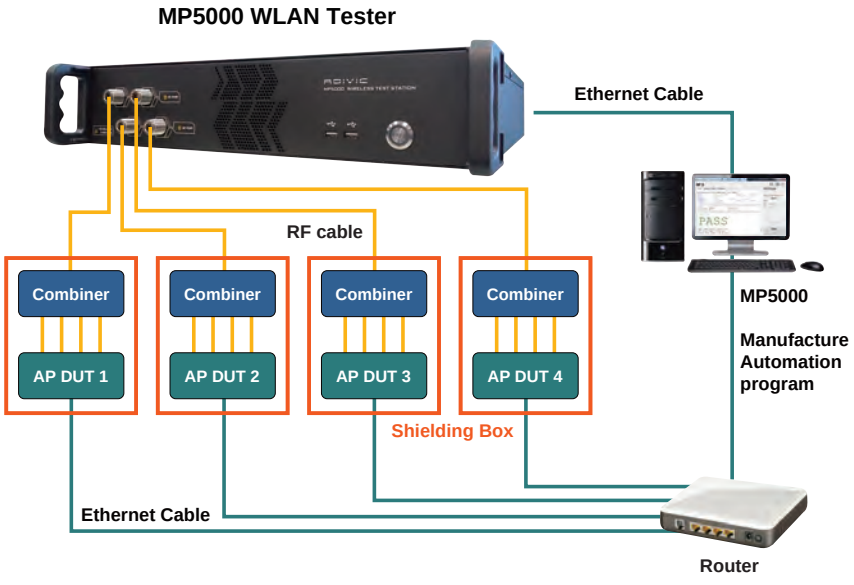
MP5000 R&D Graphic Program

MP5000 Full Test Setup for R&D/QA



MP5000 is a Windows-based industrial computer. GUI application that runs on MP5000 is accessible to a user who applies Windows Remote Desktop from a separate customer PC. This customer PC requires no additional software installation.

MP5000 Automated Test Setup for Mass Production



MP5000
Wireless Test Station

MP5000 General Technical Specifications

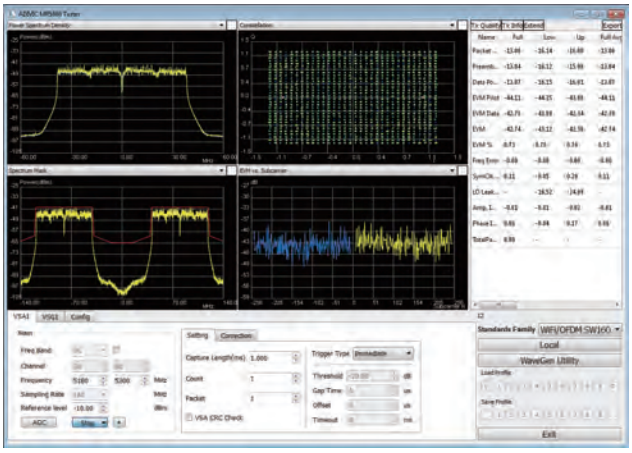
>> VSA (Vector Signal Analyzer)

Parameter	Value
Input frequency range	2150 MHz ~ 2600 MHz 4900 MHz ~ 6000 MHz
IF bandwidth	120 MHz
Maximum input power	+30 dBm peak +20 dBm average
Input power accuracy @ (+20 to -75 dBm)	+/-0.75 dB (+/-0.5 dB Typical)
Phase noise	< -100 dBc 1 KHz offset @ 2.4 GHz < -95 dBc 1 KHz offset @ 5.8 GHz
LO leakage (DC offset) @ after self-calibration	< -50 dBc @ -10 dBm
Sideband image (IQ-imbalance) @ after self-calibration	< -50 dBc @ -10 dBm
IMD3 (Third order input inter-modulation distortion)	< -70 dBc @ -10 dBm
Input return loss	< -12 dB
ADC resolution	16-bit
ADC sampling rate	160 MS/s
Initial frequency accuracy	+/-50 ppb maximum (OCXO) @ 25 ℃, after 30 minutes warm up
Frequency temperature stability	+/-20 ppb maximum (OCXO) @ 0 ~ 50 ℃
Frequency aging	+/-1 ppb / day maximum (OCXO) +/-100 ppb / year maximum (OCXO)
Operating temperature	0 ~ 50 ℃
Storage temperature	–25 ~ 60 °C
Operating voltage	100 ~ 240 V AC (+/-10%) 50 ~ 60 Hz (+/-5%)
Warm-up time	> 30 minutes

>> VSG (Vector Signal Generator)

Parameter	Value
Output frequency range	2150 MHz ~ 2600 MHz 4900 MHz ~ 6000 MHz
IF bandwidth	120 MHz
Maximum output power @ CW	+0.00 dBm
Minimum output power @ CW	-130.00 dBm
Output power accuracy @ (0 to -95 dBm)	+/-0.75 dB (+/-0.5 dB Typical)
Phase noise	< -100 dBc 1 KHz offset @ 2.4 GHz < -95 dBc 1 KHz offset @ 5.8 GHz
LO leakage (DC offset) @ after self-calibration	< -50 dBc @ -10 dBm
Sideband image (IQ-imbalance) @ after self-calibration	< -50 dBc @ -10 dBm
IMD3 (Third order input inter-modulation distortion)	< -60 dBc @ -10 dBm (two -13 dBm tone)
Output return loss	< -12 dB
DAC resolution	16-bit
DAC sampling rate	960 MS/s
Initial frequency accuracy	+/-50 ppb maximum (OCXO) @ 25 ℃, after 30 minutes warm up
Frequency temperature stability	+/-20 ppb maximum (OCXO) @ 0 ~ 50 ℃
Frequency aging	+/-1 ppb / day maximum (OCXO) +/-100 ppb / year maximum (OCXO)
Operating temperature	0 ~ 50 ℃
Storage temperature	–25 ~ +60 °C
Operating voltage	100 ~ 240 V AC (+/-10%) 50 ~ 60 Hz (+/-5%)
Warm-up time	> 30 minutes

MP5000 GUI outlook (Wi-Fi)



MP5000 automated mass-production turnkey software

ADIVIC RF TEST & MEASUREMENT
6F., No.345, Xinhu 2nd Rd., Neihu Dist., Taipei City 114, Taiwan TEL: +886 2 2791 1718 FAX: +886 2 2791 1887 www.adivic.com