Wireless 3920B Series Analog and Digital Radio Test Platform





Featuring Improved RF Signal Generator Phase Noise Performance

Introducting the 3920B, the latest radio test solution from Aeroflex for engineering, production and field service applications. The 3920B features an improvement to the RF signal generator phase noise specification of -110 dBc/Hz at 10 kHz offset. The instrument provides a comprehensive range of general purpose analog measurement facilities as well as advanced digital test options. The 3920B includes many standard features as well as a host of optional test capabilities and digital personalities.

The 3920B standard features include:

- 1 GHz frequency range
- High performance FM/AM/SSB analog duplex test capabilities
- Sensitive receiver with built-in pre-amp for off air measurements
- Color coded pass/fail results
- -140 dBm (typical) DANL spectrum analyzer with 8 markers
- Dual-Channel oscilloscope to 4 MHz
- Full audio analysis for AF level, frequency, SINAD and distortion measurements
- Three high accuracy audio modulators/function generators
- Three high accuracy audio baseband generators
- Tone encode and decode functionality including DTMF, DCS, tone remote, 2-tone sequential, and 5/6-tone
- GPIB, Ethernet, USB and RS-232 interfaces
- HP/Agilent 8920B remote emulation

The 3920B also includes many optional features including:

- 2.7 GHz frequency range extension
- Harmonics and spurious measurements
- Tracking generator
- · Audio spectrum analyzer and audio tracking generator (used for analog simulcast alignment)
- IQ generator for use with IQCreator®
- P25 conventional operation with advanced parametric/protocol analysis
- P25 trunking operation
- LSM generate and receive analysis
- P25 Phase II TDMA physical layer transmitter and receiver testing
- Off Air Monitor for P25 message logging protocol analysis tool
- P25 AES encryption
- SmartZone™ and SMARTNET™ trunking
- DMR (MOTOTRBOTM) mobile and repeater tests
- TETRA mobile, base station and DMO tests
- HPD (High Performance Data) base and mobile simulation
- NXDN™, dPMR and ARIB STD T98

Automatic test and alignment options include:

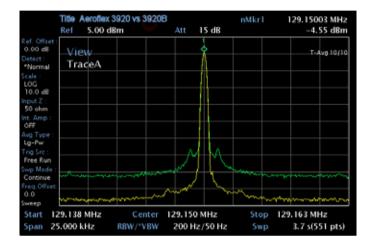
- Motorola ASTRO®, ASTRO 25 and APX[™] Series radios
- · EF Johnson ES Series radios
- BK DPHX5102X Series radios
- TIA/EIA-603 FM land mobile radio test software
- MOTOTRBO radios
- Harris P7300, P5500 and XG-75 Series radios
- Kenwood P25 5X10 Series radios
- DMR Repeaters

The one test set for all your narrowbanding test needs!

With the largest selection of digital radio options of any radio test set, the 3920B will meet all of your narrowbanding test needs, both now and in the future. The software defined digital architecture of the 3920B provides for future technology enhancements as new digital technology becomes available. You can easily perform software updates in the field, making additions of new software features and options as simple as plugging in a USB flash memory drive.

New Low Phase Noise Signal Generator

The 3920B now includes a low phase noise signal generator. This greatly improves the performance for tests like receiver selectivity, or adjacent channel measures such as adjacent channel rejection ratio.



Phase noise 3920B versus 3920

Ease of Use

Combining the power of an onboard PC with a 30 GB solid state drive and Linux OS, the 3920B can support USB mouse and keyboard interface for very easy operation as well as almost unlimited save/recall setups, saving time and effort. Multiple methods of controlling the 3920B include the front panel keys, using a mouse and keyboard, or through a VNC application on your PC, touch-screen tablet or mobile phone.

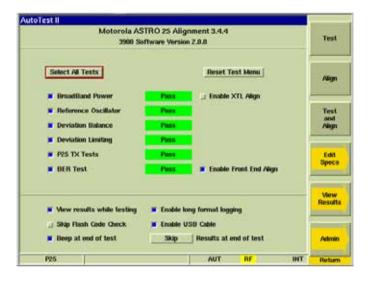
Ease of Test

To make you more productive, the 3920B is not only simple to use but

has features that makes testing a radio quick and repeatable. The 3920B features easy-to-read meters with Pass/Fail color coding for instant Go/NoGo testing. With these easy-to-configure meters, you can set up unique Pass/Fail parameters for each radio type that you are testing. When used with the save/recall locations, this allows for instant recall of the test parameters, so semi-technical or non-technical individuals can simply key the radio and test. The meters will display "Green" for good, "Red" for high and "Blue" for low. A quick glance and the operator will know that the radio is within established test parameters.

Automatic Testing

The Auto-Test II environment provides you with the capability to turn the 3920B into a stand alone ATE test environment. With the built-in PC running your test script, or one of our available automatic test and alignment applications, the 3920B can be conformed to your exact testing needs. Available with the Auto-Test II option for the 3920B are a selection of applications covering many of the latest digital radios. With these applications, you can automatically test and align the transmitter/receiver of a radio in as little as 5 minutes.



Automatic Radio Test and Alignment Application

More automatic test and alignment options are being added all the time. For the latest selection of scripts for the 3920B, go to www.aeroflex.com/3920B and click on the 3920B Automated Test Applications link in the Product Directory.

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