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RF Explorer 6G Combo - Specification

6GHZ



RF Explorer 6G Combo is a handheld digital spectrum analyzer, a very affordable tool for work in all popular frequency bands. It is based on a highly integrated frequency synthesizer and double balanced mixer which offers high performance, compact size, low consumption and low cost.

It has been designed to be used equally well outdoor and indoor, and can be connected to a PC for extra functionality using standard mini-USB 2.0 connector.

This model includes a 6G baseline unit plus an RFEMWSUB3G Expansion Module conveniently assembled and tested. It comes with two SMA connectors and three antennas: a nice Nagoya NA-773 wideband telescopic antenna for all Sub-GHz frequencies, a rubber duck 5.8 GHz and a whip helical for 2.4GHz band. Additional, specific band antennas may be needed to cover efficiently some of the frequencies supported.

The combination of these two models offer coverage for most used communication frequency range used in modern communication technologies including WiFi, Bluetooth, Wireless Audio and Video, LTE, GSM, GPRS, Satellite, CATV, DTV, etc.

Feature

- Pocket size and light weight
- Solid aluminum metal case
- Includes a transport EVA carry case for RF Explorer
- Spectrum Analyzer mode with Peak Max and Hold, Normal, Overwrite and Averaging modes
- Lifetime free firmware upgrades available, open to community requested features
- High capacity Lipo for 6hs+ of continuous run, rechargeable by USB (typical on 3G mode, time in 6G range may be shorter)
- Windows PC client Open Source
- Wide band coverage to all popular RF frequencies, starting at 15MHz and going up to 2.7GHz, as well as 4.85-6.1GHz. This include very interesting frequency areas such as 2m HAM radio, all VHF and UHF, FM radio, GPS, WiFi and WiMax, Bluetooth, etc.
- Firmware: RF Explorer 6G Combo is delivered with upgraded firmware v1.12. Note some of the features and operation accuracy will be improved in upcoming lifetime free firmware revisions.

Important: Note this unit does not include RF Generator functionality, only Spectrum Analyzer functionality is available. For signal generator and tracking please consider [RF Explorer Signal Generator model RFE6GEN](#).

Specification

- Frequency band: 15-2700 MHz and 4850-6100 MHz
- Frequency span:
 - Left SMA port (6G): 2-600Mhz
 - Right SMA port (WSUB3G): 112KHz - 600MHz
- WiFi Analyzer: 13 channels in 2.4GHz band, 13 channels in 5GHz band.
- Graphics LCD 128x64 pixels, great visibility outdoors
- PC Windows client supports Windows XP/Vista/Win7 both 32 and 64bits

- Backlight for great indoor visibility
- 2 standard SMA 50 ohms Spectrum Analyzer connectors:
 - Left SMA port (6G): 4850-6100MHz
 - Right SMA port (WSUB3G): 15-2700 MHz
- Amplitude resolution: 0.5dBm
- Dynamic range:
 - Left SMA port (6G): -105dBm to -15dBm
 - Right SMA port (WSUB3G): -110dBm to -10dBm
- Absolute Max input power (no damage):
 - Left SMA port (6G): +25dBm
 - Right SMA port (WSUB3G): +30dBm
- Average noise level (typical): -105dBm
- Frequency stability and accuracy (typical):
 - Left SMA port (6G): ± 0.5 ppm
 - Right SMA port (WSUB3G): ± 10 ppm
- Amplitude stability and accuracy (typical):
 - Left SMA port (6G): ± 3 dBm
 - Right SMA port (WSUB3G): ± 6 dBm
- Frequency resolution: 1Khz
- Resolution bandwidth (RBW):
 - Left SMA port (6G): automatic 58Khz to 812Khz
 - Right SMA port (WSUB3G): automatic 3Khz to 600Khz
- CE / FCC / RoHS compliant
- Weight: 225g
- Size: 113x70x25 mm