



seed studio
The IoT Hardware Enabler



RF Explorer is a handheld digital spectrum analyser, a very affordable tool for work in all ISM popular frequency bands. It is based on a highly integrated frequency synthesizer 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 WSUB1G baseline unit plus an RFEM2.4G Expansion Module conveniently assembled and tested. It comes with two SMA connectors and two antennas, a nice dual band telescopic 144/430MHz wideband antenna for Sub-GHz frequencies and a whip helical for 2.4GHz band.

Feature

- Pocket size and light weight
- Solid aluminium metal case
- Spectrum Analyser 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 16hs+ of continuous run, rechargeable by USB
- Windows PC client Open Source
- Can be extended with internal Expansion Modules for additional band and functionality
- Wide band coverage to all popular sub-1Ghz ISM bands and 2.4GHz band, including 315MHz, 433MHz, 868MHz and 915MHz, 2.4GHz WiFi, Zigbee, also including UHF TV, 70cm and 33cm HAM radio, GSM, etc. Any frequency from 240MHz to 960MHz and 2350MHz to 2550MHz is supported.

Important

Note this unit does not include RF Generator functionality for the Sub-GHz band, only Spectrum Analyser functionality is available for the Sub-GHz band. The 2.4GHz band includes standard RF Generator.

Specifications

- Frequency band: 240 - 960 MHz and 2.35 GHz; 2.55 GHz
- Frequency span: 112KHz - 100MHz
- 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 connector, one for Sub-GHz wideband dual band telescopic 144/430MHz antenna included and another one for 2.4GHz band with helical antenna included.
- Amplitude resolution: 0.5dBm
- Dynamic range: -115dBm to 0dBm
- Absolute Max input power: +5dBm
- Average noise level (typical): -110dBm
- 2.4GHz RF Generator amplitude: -30dBm to +1dBm
- Frequency stability and accuracy (typical): +-10ppm
- Amplitude stability and accuracy (typical): +-3dBm
- Frequency resolution: 1Khz
- Resolution bandwidth (RBW): automatic 2.6Khz to 600Khz
- Weight: 185g
- Size: 113x70x25 mm

Tech support

For questions and support, please visit <https://support.rf-explorer.com>

Technical details

Weight	G.W 304.5g
Battery	Lithium Cells / Batteries contained in equipment UN3481 - PI967

Part List

RF Explorer - ISM Combo	1
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ECCN/HTS

ECCN	3A002.c
HSCODE	9030401000
USHSCODE	9030890100
UPC	841454103967