



# RF Explorer IoT Touchscreen Kit For Raspberry Pi

SKU 114992066

This advanced kit provides a cost effective solution for a high performance, color touch screen Spectrum Analyzer covering 15MHz to 2700MHz

## Product description:

This advanced kit provides a cost effective solution for a high performance, color touch screen Spectrum Analyzer covering 15MHz to 2700MHz. Included in the package kit are these these items:

- RF Explorer 3G+ IoT module
- Raspberry Pi official 7" Touch Screen
- Acrylic custom designed holder

RF Explorer 3G+ IoT modules are ready to use, advanced Spectrum Analyzer devices you can configure and control easily with Raspberry Pi using a compatible Touch Screen and free RFETouch software.

These modules are cost-effective platforms to develop your own customized Spectrum Analyzer, Power Detector, RF activity alarm, RF sniffer, RF QA test bench, etc.

Programmability and network capabilities of the hosting platform enables remote control and diagnosis scenarios, fully automated RF alarm systems, advanced assistance for unattended detection requirements such as those of radio operators, cell towers and HAM stations.

Additional items required but not included in the kit are:

- Raspberry Pi model 2, 3 or 4
- USB power source for Raspberry Pi and Touchscreen

These items can be reused from other experiments or ordered together with the kit.

Specification:

### RF Explorer 3G+ IoT module

<b>Includes the advanced 3G+ MWSUB3G RF Explorer Module</b>	
Frequency band coverage	15-2700 MHz
Antenna connector	Standard SMA 50 ohms
Advanced selectable internal input stage	Normal, LNA, 30dB attenuator
Amplitude resolution	0.5dBm
Dynamic range	-130dBm to +10dBm
Absolute max input power	+30dBm
Average noise floor level (typical with LNA enabled)	-120dBm

Frequency stability and accuracy (typical)	+10ppm
Amplitude stability and accuracy (typical)	+3dBm
Frequency resolution	1 KHz
Resolution bandwidth (RBW)	Automatic 3KHz to 600KHz
Power consumption	100 - 500mW
All modules are factory calibrated	

## Features

### **RF Explorer 3G+ IoT module**

- Design and customize your own Spectrum Analyzer, RF Detector, RF Sniffer, etc
- Open source design, open source libraries and examples
- Supported by all Raspberry Pi boards.
- Can update IoT firmware directly from Raspberry Pi no other accessories required
- Flexible board: can be connected to a Raspberry Pi by soldering a compatible female header
- Recommend to select SMA antennas for specific application
- IMPORTANT: In Raspberry Pi 3, WiFi should be shutdown to avoid interference with the analyzer.

### **Raspberry Pi Touch Screen**

- 7" Touchscreen Display.
- Screen Dimensions: 194mm x 110mm x 20mm (including standoffs)
- Viewable screen size: 155mm x 86mm
- Screen Resolution 800 x 480 pixels
- 10 finger capacitive touch.
- Connects to the Raspberry Pi board using a ribbon cable connected to the DSI port.
- Adapter board is used to power the display and convert the parallel signals from the display to the serial (DSI) port on the Raspberry Pi.

More information:

Please visit [www.rf-explorer.com/iot](http://www.rf-explorer.com/iot)

## Contents:

- Raspberry Pi Touchscreen
- RF Explorer 3G+ IoT module
- Touchscreen acrylic holder

## ECCN/HTS

HSCODE	8543909000
UPC	



