

# Radio Spectrum Processor



The SDR-play RSP is a powerful wideband full-featured SDR which covers all frequencies from 100kHz up to 2 GHz. All it needs is a PC and an antenna to provide excellent communications receiver functionality. Combined with the power of readily available SDR receiver software, enjoy all modes of operation while monitoring up to 8MHz of spectrum at a time. An open API allows developers to create new demodulators or applications around the platform.

#### **KEY FEATURES**

- Robust and strong plastic case
- Continuous coverage from 100KHz to 2 GHz
- 12-bit ADC silicon technology (not another 8 bit dongle!)
- Built-in High-Performance front-end filters
- Up to 8 MHz bandwidth
- · Good sensitivity and selectivity
- Low noise floor
- Simple USB interface (type B socket)
- SMA antenna socket
- Powers over the USB cable

#### **KEY BENEFITS**

- Ideal for portable operation
- No need for an up-converter
- Covers all amateur bands from experimental LF through HF, VHF and UHF
- Simultaneous entire amateur band monitoring possible
- Works with all the popular SDR software (including HDSDR, SDR Console and Cubic SDR)
- Compatible with existing open source radio software
- ExtlO based plugin available
- Compatible with Mirics Radio & TV software
- Software upgradeable for future standards
- Strong and growing software support network
- API provided to allow demodulator or application development
- Multiplatform support including Windows, Linux, Mac, Android and Raspberry Pi 2/3

### **SPECIFICATIONS**

#### General

- Weight 110g
- Size: 95mm x 80mm x 30mm

### Connectivity

- Single RF connector (SMA)
- USB 2.0 (high speed) type B socket

### **Frequency Range**

• Continuous coverage 100kHz - 2GHz

### **ADC Characteristics**

- Sample frequency 2MSPS 10.66MSPS
- 12 bit native ADC
- 10.4 ENOB
- 60dB SNR
- 67dB SFDR

### IF Modes

- Zero IF, All IF bandwidths
- Low IF, IF bandwidths ≤ 1.536MHz

### **IF Bandwidths**

- 200kHz
- 300kHz
- 600kHz
- 1.536MHz
- 5.0 MHz6.0 MHz
- 7.0 MHz
- 8.0 MHz

### **Typical Noise Figures**

- 12.5dB @ 3MHz
- 12.0dB @ 10MHz
- 11.5dB @ 20MHz
- 12.0dB @ 40MHz
- 4.5dB @ 100MHz
- 4.5dB @ 200MHz
- 5.0dB @ 360MHz
- 3.5dB @ 600MHz
- 3.5dB @ 1300MHz
- 4.0dB @ 1800MHz

### Front End Filtering

Automatically configured front end filtering

#### **Low Pass** 12MHz

### Band Pass

- 12 30MHz
- 30 60MHz
- 60 120MHz
- 120 250MHz
- 250 420MHz
- 420 1000MHz

## High Pass

• 1000MHz