

USRP - SDR KIT (70MHz to 6 GHz) for Wireless Link Analysis:

Requirement: The product should be handy and be compatible to run on battery (or alternate powering mechanism) for field trials in vegetation environments.

Purpose of use: academic/research only

Essential Accessories: power supply, power adapters, connecting cables, calibration kit (if any) and Additional accessories as required for the field trails. Supported software tools.

Suitable antennas (min 4 no.) up to 6 GHz, connectors and adaptors for antennas: Antennas with wide band width, wider coverage and large gain are preferable over Omni-directional antennas narrow band antennas.

Specifications:

- Tunable RF transceiver with full-duplex operation (1 channel essential and 2 channels preferable).
- MIMO (2 Tx & 2 Rx) operation with up to 56 MHz of real-time bandwidth (61.44MS/s quadrature)
- Fast and convenient SuperSpeed USB 3.0 or USB 2.0 connectivity
- GNURadio and OpenBTS support through the open-source USRP Hardware Driver™ (UHD) or any other platform.

Additional Specs:	
Transmitting mode: Frequency range: 70 MHz to 6 GHz Frequency step: <1 kHz Maximum output power (Pout): up to 20 dBm and above Gain range: 70 to 80 dB and above Gain step: 0.25 dB Frequency accuracy: 2.5 ppm Maximum instantaneous real-time bandwidth: 56 MHz Maximum I/Q rate: Streaming: 15 MS/s Burst: 61.44 MS/s Digital-to-analog converter (DAC): 12 bits	Receiving mode: Frequency range: 70 MHz to 6 GHz Frequency step: <1 kHz Gain range: 70 dB and above Gain step: 1.0 dB Maximum input power (Pin): -15 dBm and above Noise figure: below 5 dB to 7 dB Frequency accuracy: 2.5 ppm Maximum instantaneous real-time bandwidth: 56 MHz Maximum I/Q rate: Streaming: 15 MS/s Burst: 61.44 MS/s Analog-to-digital converter (ADC): 12 bits

Any other additional specification/accessories that supports the intended use of equipment.

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