



Your Total Hardware Solution!

WR-G305e Receiver

Overview

The WinRadio WR-G305e is a software-defined PC-based wideband receiver (9 kHz to 1800 MHz, expandable to 3500 MHz with an optional *downconverter*). It represents an external version of the *WR-G305i* receiver, with equivalent performance.

The PC-based receiver is USB-controlled and compatible with modern desktop and laptop computers with USB interface. An optional serial interface is also available.

The **WINRADIO G305e**: A truly ground-breaking scanner that will surely amaze you.



Features

- Frequency range from 9 kHz to 1800 MHz (except cellular bands where required by law)
- Software-defined demodulation
- Extraordinary sensitivity
- Tracking front-end filters
- Excellent strong signal handling
- Real-time spectrum analyzer
- Spot-on tuning in 1Hz steps
- Accurate signal strength indicator
- Fast scanning speed
- Multiple squelch modes
- Very low phase noise
- DRM decoder option
- APCO P25 decoder option
- 3.5 GHz downconverter option
- USB interface (serial optional)
- Plug and Play installation

With the [Professional Demodulator Option](#), the many additional features include:

- Continuously variable IF bandwidth 100 Hz - 15 kHz
- User adjustable filter selectivity
- WinRadio [Digital Bridge™](#) compatibility
- Built-in test and measurement instrumentation
- Interactive block diagrams



What's included?

The standard WR-G305e package includes:

- WR-G305e receiver
- Application software
- Comprehensive user's manual
- Low-noise linear power supply
- Start-up antenna
- USB cable
- BNC-to-SMA adapter

Technical Specifications

Receiver type DDS-based dual-conversion superheterodyne with software-defined last IF stage and demodulator Frequency range 9 kHz - 1800 MHz (3500 MHz with optional *downconverter*) (except cellular radiotelephone frequencies where required by law) Tuning resolution 1 Hz Mode AM, AMN, AMS, LSB, USB, CW, FMN
Optional: ISB, DSB
FMW Image/Spurious Rejection 60 dB IP3 0 dBm @ 20kHz MDS - 135 dBm Spurious-free Dynamic Range 90 dB Phase noise -148 dBc/Hz @ 100 kHz RSSI accuracy 5 dB RSSI sensitivity 1 μV Selectivity (-6dB)

AM	6 kHz
AMN	4 kHz

AMS	4 kHz
LSB, USB	2.5 kHz
CW	500 Hz
FM3	3 kHz
FM6	6 kHz
FMN	12 kHz
FMW (optional)	230 kHz

Scanning speed 60 channels/s max Sensitivity

(AM/SSB/CW 10dB S/N)

(FM 12dB SINAD)

Mode	0.15-500 MHz	500-1800 MHz
AM, AMS	1.7 μ V	1.85 μ V
LSB, USB	0.35 μ V	0.37 μ V
CW	0.2 μ V	0.25 μ V
FM3, FM6, FMN	0.7 μ V	0.8 μ V
FMW (optional)	2.0 μ V	2.0 μ V

Intermediate frequencies

IF1: 109.65 MHz

IF2: 12 kHz

Roofing filter 2 x 4-pole 20 kHz BW crystal filter Frequency stability 10 ppm (0 to 60° C) Antenna input 50 ohm (SMA connector) Output 12 kHz IF2 output

(sound card Line Input compatible) Interface USB (1.0 and 2.0 compatible)

(serial interface optional) Dimensions Length: 164 mm (6.46")

Width: 96 mm (3.78")

Height: 41 mm (1.61") Weight 467 g (16.40 oz)

Specifications are subject to change without notice due to continuous product development and improvement.



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