



### Excelsior Series Receiver WR-G39DDCi

**Overview** The WinRadio WR-G39DDCi model is a high-performance HF/VHF/UHF/SHF software-defined receiver with a frequency range from 9 kHz to 3500 MHz, with two independent channels of 4 MHz wide instantaneous bandwidth available for recording and further digital processing, plus a 16 MHz wide real-time spectrum analyzer.

The receiver offers an unparalleled flexibility given its SDR architecture, respectable dynamic range, high sensitivity, scanning speed and accuracy of performance, making it capable of filling not only the role of a monitoring receiver but also that of a fast search receiver and measuring receiver, with many operational and instrumentation features not usually found on receivers of any price category.

#### Features

- Frequency range 9 kHz to 3500 MHz (except cellular bands where required by law)
- Ultra-fast search speed 1 GHz/s
- Two independent receiver channels
- Real-time spectrum analyzer up to 16 MHz wide
- Unlimited width swept spectrum analyzer
- Audio spectrum analyzer
- Audio and IF recorder
- High sensitivity
- Excellent dynamic range
- Numerous signal analysis tools
- Numerous types of search and scanning modes
- Numerous precise measuring tools
- Optional IF output (70 MHz)
- Optional reference input/output (10 MHz)
- PCI-e bus interface

The receiver has a robust front-end, which features an up-converter for excellent suppression of mirror images, eliminating a need for complex pre-selector filters which introduce distortion and reduce the noise figure.

The receiver connects to an IBM-compatible PC via the PCI-e bus. Several receivers can be controlled by a single PC to form a multi-channel receiver system.

**Software** The WR-G39DDCi software contains numerous advanced features such as several types of searching and scanning, five types of squelch, many tuning options, virtually unlimited memories and a rich on-line help facility.



There are two concurrent DDC channels with 24 selectable output bandwidths ranging from 20 kHz to 4 MHz. Each can be used as an independent "virtual receiver". There is also a simultaneous 16 MHz wide real-time spectrum analyzer. There are numerous demodulation modes, continuously variable IF bandwidth from 1 Hz to 320 kHz (in 1 Hz increments), waterfall spectrum analyzers, scanning, searching, logging and task scheduling facilities, as well as an audio real-time spectrum analyzer, test and measurement functions, noise blankers and notch filters.

There is also an integrated recorder, making it possible to instantly record and playback the received signal both at the IF and audio levels, for both channels. Recording offers also pre-buffering feature in order not to lose any transmission.

The receiver is entirely software-defined, which means that additional demodulations or decoding modes can be easily added by a mere software change.