



- **Compact design**
- **Frequency range: 9 kHz - 12 GHz**
- **Scanning speed: 32 MHz/s**
- **Time of analysis 100% of detection (POI): 100 Ms**
- **Scanning speed is 30-50 GHz/s**
- **High dynamics SFDR 80 dB**
- **Control via USB-3.0**
- **Preselector (17 band filter)**
- **API for the development algorithms of treatment signals**
- **Support the development environment SDR (GNUradio, Osmocom, Pothos etc.)**

Our company introduces a new version of high-speed receiver designed for fast search and detection of radio emitting devices and transmitters (RTSA) Spectrum Jet 3.0. The new version of DSP system features a controller with USB-3.0 interface, which allows increasing monitoring speed together with computer control about 8-10 times up to 30-50 GHz/s (frequency resolution is 10 KHz).

Line receiver is designed as a double superheterodyne receiver. After IF output, further signal processing is carried out in DSP system or in digital receiver. A new version of the digital receiver, as earlier, is based on SDR – Soft Defined Radio, which includes ADC, DDC on PLD with minimum decimation factor equal to 4, management and communications controller.

Our Computer enables to input/output dates with speed 160 Mb/s and control the analyzer.

Our software enables a user to measure parameters of radio signals, obtain spectral estimation, demodulate signals, and also use the receiver as a radio control or search system: register any new signals, including bursts, against the background of earlier

accumulated averaged panorama, carry out statistical processing and use specific algorithms of search of unauthorized signals in the nearest area.

Technical specifications of Spectrum Jet 3.0

Frequency range	9 kHz -12 GHz
Scanning speed at 10 kHz resolution	30 - 50 GHz/s
Intermediate frequency	140(70) MHz
Intermediate frequency bandwidth	24(32) MHz
Bandwidth of spectrum analyzer	160 KHz - 32 MHz
Displayed average noise level (DANL)	-155 dB / Hz
Demodulators	Be determined by soft
Noise ratio	Not more than 12 dB
Neighbouring channel rejection	Not worse than 70 dB
Spurious-free dynamic range	Typ. 80 dB
Frequency setting time of the line receiver	Not more than 150 µs
Phase noise of heterodyne at turning out on 10 kHz	Not more than -86 dBc/Hz
Long-term instability of heterodynes (optionally)	10 ppm (not worse than +/- 1 x 10⁻⁸)
Maximum level of input HF signal	Not more than 20 dBm
Operation temperature range	- 20.....+60 C
Dimensions	170x100x44 mm
Weight	1150 g.