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INTELLIGENCE TECHNOLOGIES

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YRi 20G (RIGID) - SPECTRUM ANALYZER

The YRI 20G is a professional real time Spectrum Analyzer. The system designed with several levels of frequency analysis from 100 kHz to 20 GHz, to detect illicit eavesdropping, perform on-site surveys of communications systems, perform radio frequency emission analysis, spectrum abuse analysis, analyze frequencies while driving using an integral GPS antenna, and RF investigation with its dedicated software with audio/video demodulator. The system intended for work in the field, in cars and inside a building. System weight is 12 kilograms, and it's placed in a Pelican case that includes shock absorbers, fans, a 14-inch touch screen, 2 USB connectors, an RJ45 connector, VLC, IR and Ultraviolet Prob, omni/directional antennas, as well as other accessories included in the kit. The system works through a direct connection to the local electricity 220v, car battery 12/24v or through an internal battery that provides electricity for 3 hours of independent operation.

Spectrum Analyzer Features:

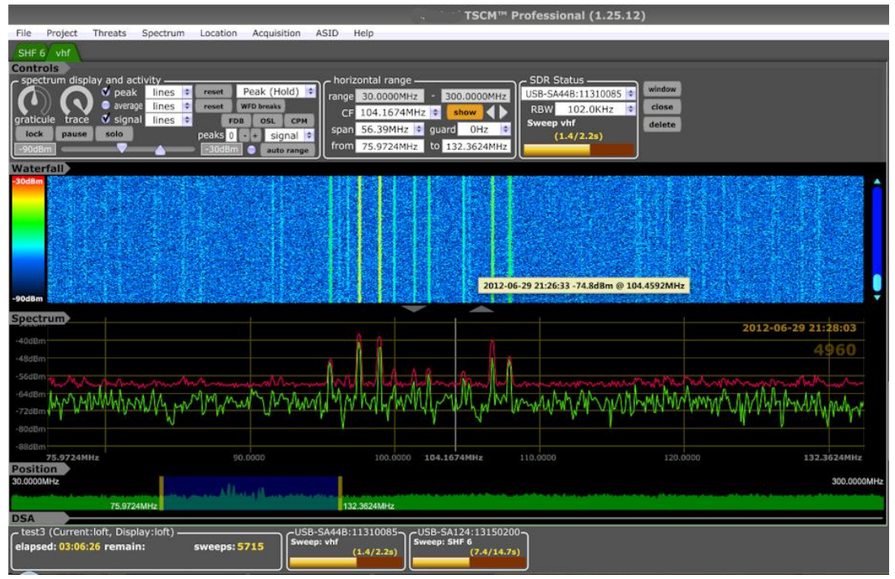
High-performance real time spectrum analyzer and monitoring receiver. Tuning from 100 kHz to 20GHz, the analyzer has 160 MHz of instantaneous bandwidth (IBW), 110 dB of dynamic range, 1 THz/sec sweep speed at 30 kHz RBW (using Nuttall windowing), and phase noise performance that is low enough to contribute less than 0.1% error to EVM measurements and rival.

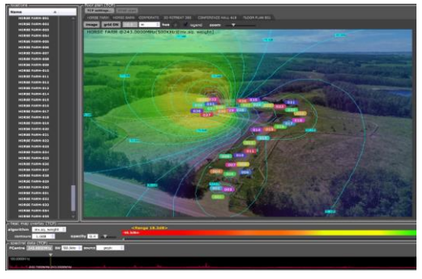
SPECIFICATIONS OF WIDE BAND RECEIVER

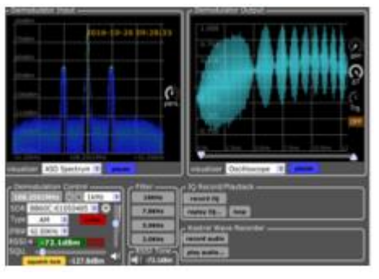
Sl. No.	Specifications	Desired Parameters	Comments
1	*Receiver*		
a)	Frequency Range	10KHz – 20 GHz or better	100kz-20GHz
b)	Sweep Speed/Scan Rate	Not less than 8 GHz/Sec in steps of not more than 15KHz	**SWEEP SPEED** **Speed** **RBW** 1THz/sec 1MHz 1THz/sec 100kHz 1THz/sec 30kHz 160GHz/sec 10kHz 18GHz/sec 1kHz
c)	Sensitivity	Better than-110dBm	Up to -160dBm
d)	Dynamic Range	Not less than 90 dB	110dB
e)	Tuning Resolution	Not more than 1 Hz	0.1Hz
f)	DANL	Better than-100dBm	**DISPLAYED AVERAGE NOISE LEVEL (DANL)** **Input Frequency Range** **dBm/Hz (Typical)** 100 kHz to 700 MHz –156 dBm 700 MHz to 2.7 GHz –160 dBm 2.7 GHz to 4.5 GHz –158 dBm 4.5 GHz to 8.5 GHz –153 dBm 8.5 GHz to 15 GHz –154 dBm 15 GHz to 20 GHz –149 dBm
2.	Functions	Provisions to generate, display and save a list of signals active at the time of scanning, providing information on frequency, BW, type of modulation, power etc., Provision for mathematical operations on the spectrum such as subtraction of signal lists stored, Provisions for detection of RF Bugs. AC Mains carrier bugs, IR Bugs and visible light/Laser based bugs.	Have all features
3.	Display Modes	Must have the provision to display full span spectrum analyzer window, water fall display window and signal log window on an inbuilt LCD/LED screen of the size not less than 6" display.	Have all features 14" display
4.	Demodulation Modes	At least AM and FM demodulation for Audio, Video demodulation support of some nature such as PAL, NTSC etc should be there.	Have all features
5.	Antenna system	Inbuilt auto-switching antenna system	3 antennas with auto switching
6.	Locating Bugs	There should be some provision to find location of bugs with some portable accessories.	Omni (3Ant), directional, IR, VLC, Ultraviolet prob.
7.	Portability	Operational weight including Batteries, antenna and location finding tools to be not more than 10 kg.	9kg

8.	Power Supply		
a)	AC Mains Supply	100-240 V AC, 50/60 Hz	YES
b)	Battery	Internal Rechargeable Battery (with battery charger) with atleast 1 Hr back-up.	Internal battery with 3 Hours of independent operation.
9.	Operating Temperature	0° to 50° C	0° to 50° C (on special request can be extend to -40° to +65°C)
10.	Warranty	24 Months	12 Months (can be extend to 24 months).

- RF Spectral Display (RSD): used to observe the ambient RF spectrum environment in the frequency domain and observe discrete signal characteristics.
- Multiple Spectrum Windows: actively display, search, and analyze any number of independent spectral windows as standard Windows TABS.
- Waterfall Display (WFD): immediately observe and review any new signal events, as they occur in the time domain, without interrupting the collection process.
- Graticule Control Group: easily setup, navigate, view, and analyze, multiple instances of independent spectrum and waterfall data.
- Live View Analysis (LVA): real time signal event analysis and review without the need to stop or interrupt the collection process.
- Trace Math Analysis (TMA): select and display a standard differential trace math comparative for any two (2) locations.
- Demodulation and Visualization: quickly demodulate and record audio samples of AM, FM, USB and LSB signals.
- Fat-Fourier Transforms (FFT): display various real0time FFT windows within the demodulation control group.



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