

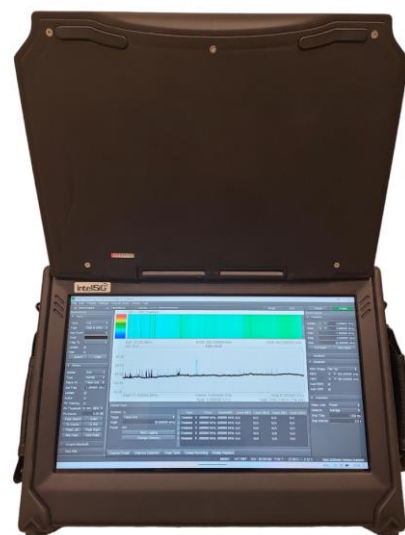


IntellSiG
INTELLIGENCE TECHNOLOGIES

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YRI 15G - TSCM SYSTEM

The YRI 15G is a professional TSCM system. The spectrum analyzer is designed with several levels of frequency analysis from 100 kHz to 14.5 GHz, to detect illegal eavesdropping, perform on-site surveys of communication systems, perform radio frequency emission analysis, spectrum abuse analysis and RF investigation with its dedicated software with audio/video demodulator. The YRI 15G is hand-held with total weight is 4.5 kilograms, placed in an ergonomic case with a 14-inch touch screen, 2 USB 3.0 connectors, RJ45 connector, integrated multi antennas with automatic switching, directional antenna, VLC / IR / ultraviolet probe, as well as other accessories included in the kit. The system works through a direct connection to the local electricity or through a battery that provides power for 2.5 hours of independent operation.



Spectrum Analyzer Features:

High-performance spectrum analyzer and monitoring receiver. Tuning from 100 kHz to 15GHz, the analyzer has 160 MHz of instantaneous bandwidth (IBW), noise level (DANL) up to -163 dBm, 200GHz/sec sweep speed at 70 kHz RBW (using Nuttall windowing)

Preliminary Specifications			
Frequency Range	100 kHz to 14.5 GHz		
Sweep Speed	Speed	RBW	
	• 200 GHz/sec	≥70 kHz	
	• 135 GHz/sec	30 kHz	
	• 90 GHz/sec	10 kHz	
	• 36 GHz/sec	3 kHz	
	• 13.5 GHz/sec	1 kHz	
Displayed Average Noise Level (DANL) REF LEVEL ≤ -20 dBm	Input Frequency Range	dBm/Hz	
	• 100 kHz to 50 MHz	-159 dBm	
	• 50 MHz to 2.7 GHz	-163 dBm	
	• 2.7 GHz to 8.5 GHz	-159 dBm	
	• 8.5 GHz to 14.5 GHz	-155 dBm	
I/Q Acquisition Modes	Calibrated Streaming I/Q: Up to 40 MHz of selectable I/Q streaming bandwidth		
Timebase Accuracy	• +/- 1 ppb when locked to GPS		
System Noise Figure (typ)	<ul style="list-style-type: none"> • 8 dB over 50 MHz to 2.7 GHz • 10 dB from 2.7 GHz to 4.5 GHz • 12 dB from 4.5 GHz to 8.5 GHz 		
Linearity	IP ₂	IP ₃	
	• 50 kHz to 650 MHz	+36 dBm	• 50 MHz to 2.7 GHz
	• 650 MHz to 4.5 GHz	+25 dBm	• 2.7 GHz to 6 GHz
	• 4.5 GHz to 14.5 GHz	+20 dBm	• 6 GHz to 14.5 GHz
			+26 dBm
			+23 dBm
			+18 dBm
Amplitude Accuracy	100 kHz to 6 GHz	6 GHz to 14.5 GHz	RBW filter shape
	• ± 2.0 dB	• ± 3.0 dB	• Flat-Top windowing
Residual Responses REF LEVEL ≤ -20 dBm	• 100 kHz to 14.5 GHz -90 dBm		
SSB Phase Noise at 1 GHz Center Frequency	Offset Frequency	dBc/Hz	
	• 10 Hz	-55	
	• 100 Hz	-78	
	• 1 kHz	-104	
	• 10 kHz	-118	
	• 100 kHz	-118	
	• 1 MHz	-134	
Lo Leakage at RF Input	• 100 kHz to 5 GHz	-80 dBm	
	• 5 GHz to 14.5 GHz	-56 dBm	
Spurious Mixer Responses	• -40 dBc (Typical)		

TSCM Professional Software Features:

- 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.

