

HSA-Q1

Handheld RF Spectrum Analyser

Portable RF Analysis 1MHz – 13.44GHz



The **HSA-Q1** is a fully integrated portable RF Spectrum Analyser for professional countermeasures use (TSCM). It has been designed with the highest possible technical specification to ensure maximum detection capability and has a range of invaluable features to aid countermeasures RF detection or 'Sweeps'. Easy to use despite capability with added advantage of autonomous portable use.

FEATURES

- Frequency Range 1 MHz to 13.44 GHz
- Sweep time of just 0.5 seconds (Full Range)
- Spectrogram Waterfall Function for detected signal analysis
- Data Logging to USB Stick with Time & Date stamp
- 6" TFT Display Screen - Outdoor Readable
- Internal Lithium Polymer Battery - 4 Hours Battery Life



DESCRIPTION

Frequency Spans can be set anywhere from the whole 13.44 GHz frequency range down to just 25 Mhz when detailed signal analysis is required. Simply move the cursor onto any detected signal and press the 'Zoom' button to view the signal in more detail.

The Waterfall (Spectrogram) function shows a real time full colour graphical display of any detected signal to allow the user further analysis. This is especially useful in analysing modern pulsed digital signals (or frequency hopping signals) such as those from Cellular, Wifi, Burst and GPS based devices.

RF Adjustment RF Sensitivity can be adjusted over 5 levels: Maximum (-80 dBm), for example, to detect all signals including those in other adjacent rooms or even outside the building, down to Minimum for when location of a specific nearby signal source is required

Tune In The HSA-Q1 features a Tune-Listen function where at the press of a button the user can direct tune into any signal detected, view the signal pattern and see the signal strength live (down to -100dBm). If required the user can also select Wide FM, Narrow FM or AM demodulation and listen to the detected signal through the built in loudspeaker or earphones. This can be especially useful in identifying conventional bugs with microphones or eliminating other innocent detected signals such as broadcast radio

Comparison If required the HSA-Q1 can perform a 'Background' scan where it will learn and store the current RF environment. This can be stored and recalled at any time in the future for comparison to see if any new suspect signals have appeared in the RF environment since last checked. New signals will be highlighted on the display for closer inspection.

Persistence Mode offers further analysis of any detected signal. The more 'persistent' the signal is (the longer it remains detected) its colour will change from blue through the colour spectrum to red for the longest present signals. This can be used to identify persistent signals that might otherwise be hidden in a noisy RF environment.

Memory Log function means sweep data can be stored by simply connecting a USB stick. Sweep data will be stored in time and date format and displayed graphically to be recalled at any time for further graphical analysis.

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| Detected Frequency Range: | 1 MHz to 13.44 GHz |
| Sweep time: | 500 ms (Full Range) down to 200ms (Lower Range) |
| Waterfall Function: | Real Time Colour Spectrogram |
| Tune & Listen Function : | Direct Tune to any frequency (1 KHz Resolution) AM/WFM/NFM Demodulation via Speaker or Earphone |
| Background Memory Function: | Record RF environment and store for later comparison |
| RF SENSITIVITY IN SWEEP MODE: | -80 dBm Max |
| RF Sensitivity in Tune & Listen Mode: | -100 dBm Max |
| Data Logging interface: | to USB Stick – Time and Date Stamped |
| Audio Output: | Internal Speaker or Headphone Socket |
| RF Connector: | TNC Jack |
| Antenna 1: | Multi-Element 13.44GHz - Length 220mm x Dia. 17mm |
| Antenna 2: | Telescopic Whip Antenna (Low Frequency use) |
| Power: | Internal Lithium Polymer Battery – up to 4 Hours Battery Life |
| DC Charge: | Micro USB |
| Unit Weight & Size | 1.3 Kg Main Unit, H 223mm x W 158 mm x D 45mm |
| Case Size | Compact Military Standard -L363mm x W282mm x H120mm |

