esoteric
/i.seu'terik/ a. intelligible only to those with special knowledge

TSCM Lite

TSCM Lite is a collection of devices developed to help operators uncover hidden eavesdropping devices by alerting to their egress methods upon a search.

Traditional Technical Surveillance Countermeasures equipment is expensive and requires operation by experienced, technical personnel. Now you can suppliment regular, professional TSCM searches with your own in-house capability with this collection of easier to use equipment.

Developed following a direct request from government to support their specialist TSCM training, TSCM Lite can be used as portable "sweeping" devices for searching rooms prior to meetings or as part of a permanent monitoring capability to protect against hostile devices being brought into a room following a professional TSCM sweep.

Radio Signals Detector & Analyser

The Radio Signal Detector and Analyser is a broadband signal detector which displays its results in both amplitude and time domains, offering an entirely new method of detection and analysis.

Based around a state-of-the-art logarithmic amplifier it is especially useful for detecting and identifying pulsed signals. Furthermore, the internal analysis software will identify Time Domain Multiple Access signals in real time. This enables GSM transmissions, very commonly used for cheap, quick plant eavesdropping devices, to be quickly identified and located, as well as identifying Bluetooth and DECT transmissions.

Conducted Signals Detector & Analyser

The Conducted Signal Detector and Analyser will detect high frequency signals on infrastruture wiring. It provides an easy to use capability for scanning mains and data cabling to identify unwanted or hostile signals.

It comprises a broadband detector with a frequency response exceeding well beyond 10MHz enabling it to detect signals which cannot be detected with broadband field-strength meters. The Detector will display its output both in time and frequency domain using a split screen.

With a DSP-based Fast Fourier Transform Spectrum Analyser it has a dynamic range of 80dB and sees clearly even the smallest carrier signals. The time domain display clearly shows pulsed signals which the analyser may find difficult.

Surface Scanner

The Surface Scanner assists the physical search by providing a visual means to identify plaster rework and pinholes. Using low-power led technology the ergonomically designed scanner makes detailed searching effortless.

Optical Signals Detector & Analyser

Detection of optical emissions which may contain intelligence is straightforward using the Optical detector. Based around state-of-the-art Indium Gallium Arsenide and Silicon sensors the detector will capture emissions up to 1.7μm - well above the capability of silicon sensors alone.

Visible light and near-IR signals are detected by conventional silicon sensors to give coverage of all likely emitting sources. The signals are displayed in a unique rolling time-domain format coupled with a spectrum analyser which will give clear indication of any modulation content of the signals. It is also equipped with an audio output to give the operator audible warning of signals and signal strength.

www.esotericltd.com

Technical Specifications

RF Scanner	Min	Typ	Max
Useable Frequency Range	1 MHz		7 GHz
Minimum Displayed Signal level	-70 dBm	-65 dBm	-60 dBm
Maximum Displayed Signal Level	-13 dBm	-8 dBm	-3 dBm
Minimum Signal Duration for Full Sensitivity		10 µs	
RF Detector Video Bandwith		4 MHz	
Operating Temperatire (excluding batteries)	-10ºC		+50ºC
Battery Life (Energizer E91)	40hrs (operating)	40hrs	5yrs (standby)

Optical Scanner	Min	Max
Detectable Wavelenghts - Near IR	780 nm	1030 nm
Visible + IR	560 nm	1040 nm
Mid IR	930 nm	1680 nm
Display	68mm	
Spectrum Analyser Bandwidth	4 MHz	
Operating Temperature (excluding batteries)	-10ºC	+50ºC
Battery Life (Energizer E91)	6hrs (operating)	10hrs (standby)

Conducted Signals Scanner IEC Port (110 VAC to 240 VAC, 50-60 Hz Measurement Module	Frequency Range	Amplitude Range	Response Time
Broadband Detector (Lowpass)	10 kHz - 4 MHz	10 mV - 1 V	1 ms
Broadband Detector (Highpass)	4MHz - >10MHz	10 mV - 1 V	1 ms
Spectrum Analyser (narrowband carrier)	30 kHz - 3.9 MHz	1 mV - 1 V	100 ms
CAT5 Port Measurement Module	Frequency Range	Amplitude Range	Response Time
Broadband Detector (Lowpass)	2 kHz - 4 MHz	10 mV - 1 V	1 ms
Broadband Detector (Highpass)	4MHz - >10MHz	10 mV - 1 V	1 ms
Spectrum Analyser (narrowband carrier)	30 kHz - 3.9 MHz	1 mV - 1 V	100 ms

Surface Scanner	Min	Max
Operating temperature (excluding batteries)	-10ºC	50ºC
Battery Life (Energiser E91)	9hrs (brightest)	150hrs (dimmest)
Illumination Distance	20mm	2000mm

Specification subject to change without notice