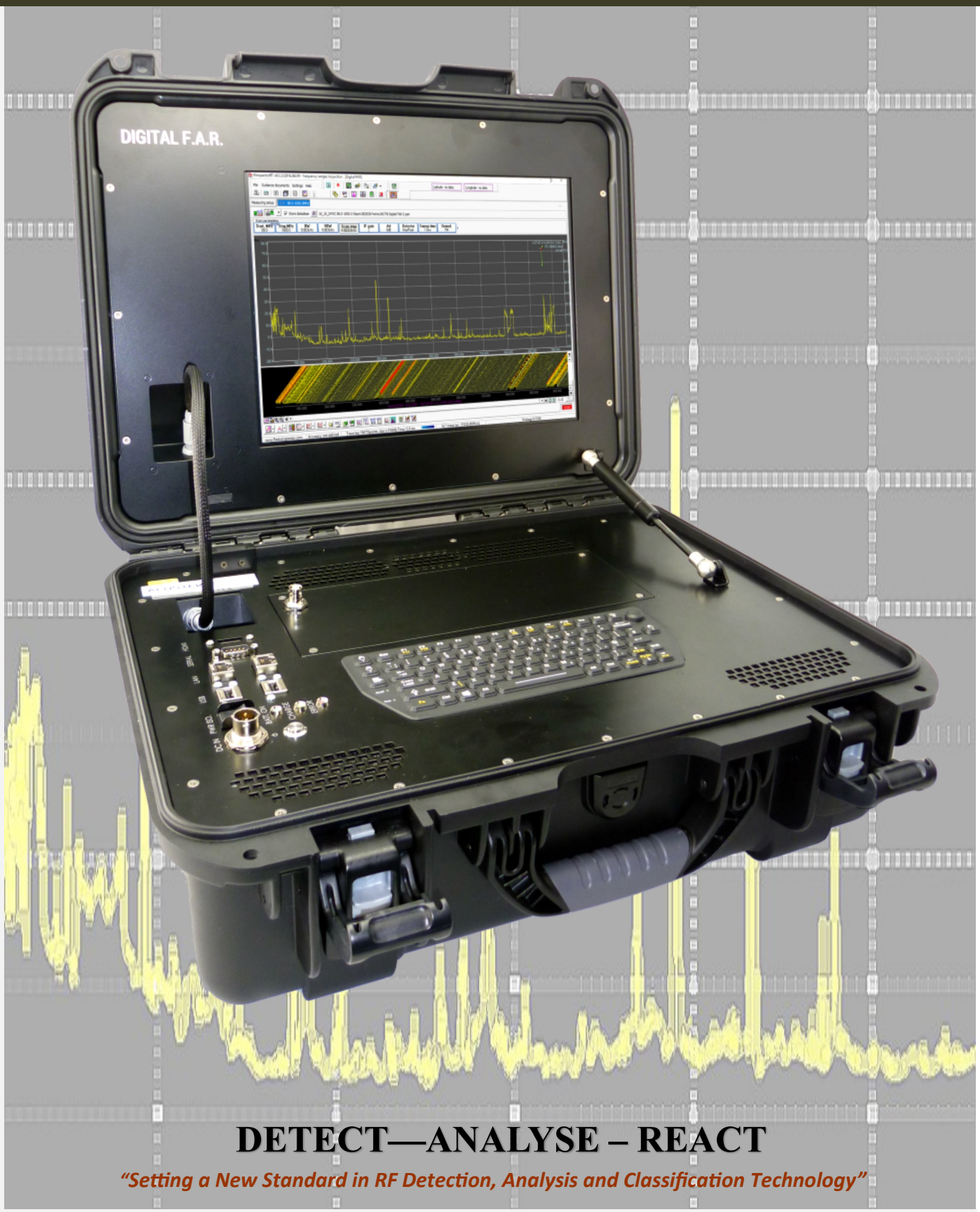
ACUSTEK

COUNTERMEASURES | SURVEILLANCE | FORENSIC

DIGITAL FAR

TSCM/SIGINT Wireless Signals Classification & Recognition



DETECT—ANALYSE – REACT

"Setting a New Standard in RF Detection, Analysis and Classification Technology"

ACUSTEK Limited, Unit 13, North Street Business Park, Swords, County Dublin, IRELAND
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The **DIGITAL FAR (Fast Acquisition Receiver)** is as provides a portable and feature filled quick deployment system. The combined military spec processing hardware and state of the art software create an innovative and advanced TSCM solution. Incorporating digital signal wave form, data packet analysis and classification. It analyzes the full real time I/Q Data stream.

Integrated Databases and display screens can be exported directly to Microsoft Word and Excel formats, text and graphic files. (Microsoft Office not in-

WHY DIGITAL

Conventional TSCM SIGINT RF tools do not allow for identification and classification of where the vast majority of modern DIGITAL threats reside such as inside, Wi-Fi, GSM, DECT, Bluetooth, Tetra, Apco25, Zigbee, Wireless HART, MiWi ISA100.11a, all which are all within the 0KHz to 6 GHz range. We also have an optional near-field RF Detector for signals up to 25 GHz for the higher powered traditional threats. New to the market is Wi-Fi Inspector for integrated in-depth Wi-Fi Analysis (also available as stand-alone unit). The use of DIGITAL FAR and its unique capabilities, has been designed with a focus on low power digital systems identification and not on broad wide-band transmission as most covert devices in use today are hiding in plain sight mixed in alongside conventional industry standard transmissions.

INDUSTRY LEADING TSCM SPECTRUM MONITORING AND SIGNAL ANALYSIS SOLUTION

The most advanced TSCM, spectrum monitoring and SIGINT software, DIGITAL FAR delivers unmatched comprehensive and highly sophisticated RF detection and analysis functionality including an extensive RF analysis toolkit, digital signal classification analysis and recognition system (SCARS), analogue TV audio/video demodulation with DVB coming, 2D & next generation 3D waterfall displays, constellation display with real-time IQ and vector analysis, unlimited recording and storage of entire sweeps with variable speed playback and powerful post processing analysis capability, storage with playback, record and store entire sweeps from beginning to end at better than 9 kHz resolution.

FEATURES

- Powerful industry leading TSCM spectrum monitoring and signal analysis hardware and software.
- Advanced RF mapping.
- Multiple trace comparison.
- 2D & Next Generation 3D Waterfall displays.
- SCARS signal Classification Analysis Recognition System.
- DTest Digital Signal Testing with Bluetooth / DECT/GSM/Zigbee/etc. analysis.
- Recording, storage and playback of entire sweeps from beginning to end at better than 9kHz resolution.
- Constellation display using Real-time IQ and vector analysis.· Audio / video demodulation.
- Comprehensive and highly sophisticated RF detection and analysis functionality.
- Advanced triggering, alarm and capture capability.
- Multiple marker / cursor measurements.
- Demodulation of headers and signal strengths along with analysis/classification of DECT, Bluetooth, Wi-Fi, GSM, Tetra, APCO 25, DMR, AM, FM.
- Tetra, APCO 25, DMR, AM, FM un-encrypted audio able to be de-modulated.
- Digital mapping support. High performance GUI.
- Automatic audio recording. 24x7 spectrum monitoring.
- Integrated Databases and display screens can be exported.
- GPS integration for drive around testing with signal strength on selected frequencies displayed on map. With GPS coordinates and speed travel also included

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DIGITAL FAR TECHNICAL SPECIFICATIONS

Receiver	
Frequency Range:	9kHz—6GHz
Sweep Speed/Scan Time:	>26GHz/s
Tuning Resolution:	0.001KHz
IF Bandwidth:	Selectable Streaming IQ Data 250KHz -27 MHz
Attenuation:	0 dB, -10 dB, -20 dB, -30 dB Captures Events from 1µs with 100% probability of interception.
Amplitude (RBW ≤100kHz)#	Range: +10dBm to Displayed Average Noise Level (DANL)
Amplitude Accuracy@	±2.0 dB
RF Input:	50 ohms
Display Mode:	2D and 3D waterfall displays with X/Y axis adjustment, Colour Sensitivity Adjustment
Video Demodulation	
Formats:	PAL, SECAM, NTSC,
System	
Identification & Demodulation Type:	DECT, Bluetooth, Wi-Fi, GSM, Tetra, APCO 25, DMR, DRM, AM, FM
Built-in Speaker	Yes
Processing:	
Processor:	4th Generation Intel mobile Core i5
Display:	15 inch Screen
Operating System:	Windows 10
Mechanical	
Dimensions:	L 503mm x W 406mm x H 193mm
Weight:	13.8 KG
Battery Life*:	Up to 2 Hours in continuous operation
Memory Size:	1TB SSD
Operating Temperature:	-10°C to +60°C
Antennas:	(9khz –1.6Ghz) and (680Mhz-6Ghz)
Internal Battery*:	98Wh Li-Ion (*= Temperature conditional)
Power Supply:	Universal Power Supply
Universal Power Supply:	INPUT: 100-240V ¬ 2,5A ¬ 50-60Hz OUTPUT: 22-26V ¬ 6,82-5,77A max
User Connectivity	
LAN Ports:	2
USB 3 Ports:	2
Serial Output:	RS-232
Aux Video Out	HDMI
Audio	Built-in Speaker

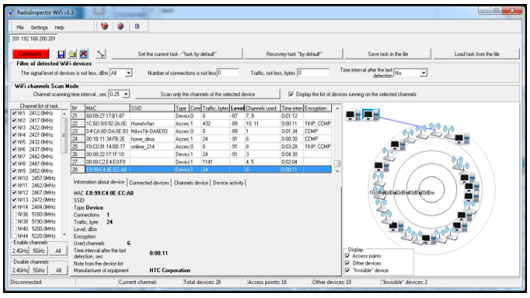
@= Absolute Accuracy	±2.0dB (Non-Native(Flattop) RBWs)
	+2.0dB/-2.6dB (Native (Nuttall) RBW's – faster DSP)

= Displayed Average Noise Level (DANL)

Input Frequency Range	dBm/Hz
9 kHz to 500 kHz	-140
500 kHz to 10‡ MHz	-154
10‡ MHz to 6 GHz	-158 + 1.1dB/GHz

DIGITAL FAR Wi-Fi Inspector

- Software for analysis of Wi-Fi devices & networks.
- Lists connected and broadcasting devices MAC addresses, relationships of clients and Access Points.
- Packet analysis of Wi-Fi networks.
- Displays all MAC addresses and SSID's where present, destination and Access Point devices.
- Compares detected MAC addresses with a list of authorised addresses.
- Estimation of traffic flow per connection and transmitter location/ identification.
- Records and analyses Access Point coverage areas. Separate compact receiver modules.



N.B. Specifications are subject to change without notice.

Please check the specifications listed are applicable at time of purchase

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