



Threat Detector

The Digital RF Threat Detector is a compact receiver for detecting RF transmitting devices. The module can be hand-held and battery powered, or wall mounted and powered via cable, depending on the application.

Each detector is provided to monitor multiple frequency bands. When operating with the Digital RF Blackshadow jammer the jammer is turned on upon detecting a threat. The signal to activate the jammer is provided on a remote connector or via radio control.

In a quiet period the Threat Detector is in listening mode. On receiving a threat the frequency of the threat is detected and the jammer transmits for 15 seconds around the threat. After 15 seconds the Threat Detector listens and if the threat still exists the jammer transmits for another 15 seconds. This mode continues until the threat has ceased.

Smart Detector

The most effective jamming occurs when the frequency of the jammer is at or around the threat.

The DRF Smart Detector detects a frequency through filters covering the bandwidth of each jammer plug-in. When a threat arises the synthesizer is set to transmit a jamming signal around the bandwidth of the threat frequency. The Smart Detector can detect multiple threat frequencies.

If during the listening mode the frequency of the threat changes the frequency of the jammer will follow the threat. If there is no longer a threat the Detector remains in listening mode and the jammer transmit amplifier is turned off to conserve the battery.



Because of the technology being used the British MOD/Export Control have classified the jammer and sales are restricted to the Security Forces, Military, Police, Embassies, Dignitaries and Politicians etc and are subject to an export license.

Bandwidth of Jammers and typical filters available within each band

Band 1	25Mhz — 125Mhz
Band 2	125Mhz — 250Mhz
Band 3	250Mhz — 500Mhz
Band 4	500Mhz — 1000Mhz
Band 5	1000Mhz—2000Mhz
Band 6	850-965MHz and 1800-1920MHz GSM Low and High
Band 7	2000MHz—3000MHz 3G / Wifi / Wimax
Band 8+	3000MHz—18000MHz in 1GHz or 2GHz bandwidth

Frequency (MHz) of typical filters in each band	Application
29-50	Radio controlled toys, cordless telephones, radio bells
66-88	Walky Talky
88-125	Radio controlled aeroplanes
135-170	VHF Walky Talky
430-470	UHF Walky Talky
850-965	CDMA
925-960	Low band Cellular GSM
1520-1625	GPS, Thuraya, Iridium
1805-1880	High band Cellular GSM/DCS
1930-1990	Cellular PCS
2110-2170	3G
2400-2500	WiFi, Wimax

Threat Detector	Available for multiple bands (e.g. GSM 900/1800, 3G & WiFi)
Smart Deector	Available 20-500MHz
Antennas	Monopole, sleeve dipole, patch
Dimension	115mm x 90mm x 36mm
Weight	Module 390g
Power	6—24VDC or 9V Battery
Temperature	-20°C to 50°C within few minutes of switch on



Digital RF maintains a policy of improvement and reserves the right to modify the specification without prior notice.