

# RF detectors/Protect 1206i vs Protect 1207i

	Typical RF detector	Protect 1206i	Protect 1207i
<i>Type of device</i>	RF detector, 1 channel	RF detector, 2 alternative channels	Detector of digital transmissions, 6 simultaneous channels
<i>What does it detect?</i>	Detects most RF signals (bugs) on all frequencies but with a relatively low sensitivity (at a close proximity)	Detects most RF signals (bugs) on all frequencies but with a relatively low sensitivity (at a close proximity).  Wi-Fi / Bluetooth detected with a relatively high sensitivity (better distance)	Such standards as CDMA, LTE800, GSM, 3G, Bluetooth, Wi-Fi, Wi-Max can be used for bugging as they can easily pass audio and video information. Protect 1207i does not cover all frequencies but detects these particular digital signals with a relatively high sensitivity and at a longer distance.
<i>What information about the signal does it give?</i>	An RF detector informs that something is found, but does not inform what exactly. As such, some external signals may cause false detections (mobile phones in an adjacent premises, etc.)	An RF detector informs that something is found, but does not inform what exactly. As such, some external signals may cause false detections (mobile phones in an adjacent premises, etc.)	The device informs what particular signal is found as it has 6 separate bargraphs, working simultaneously. So the operator knows what has been found.
<i>Frequency range</i>	Typically 50-3000 MHz	The device has 2 working modes: <ul style="list-style-type: none"> <li>• ANT1 with an uninterrupted coverage of 50-6000 MHz</li> <li>• ANT2 with coverage of a span 2400 – 2480 MHz for Bluetooth/Wi-Fi only</li> </ul>	The device covers 5 separate, highly sensitive spans: <ul style="list-style-type: none"> <li>• 824 – 849 MHz (CDMA, LTE800)</li> <li>• 880 – 920 MHz (GSM900)</li> <li>• 1710 – 1790 MHz (GSM1800)</li> <li>• 1920 – 2000 MHz (3G/DECT/GSM1900)</li> <li>• 2400 – 2480 MHz (Bluetooth/Wi-Fi)</li> </ul> It also covers 1 wideband microwave range 3000 – 7000 MHz for Wi-Fi 5.8GHz, Wi-Max and 4G/LTE detection

<i>Variants of use</i>	A sweeping tool. Can find most radio transmitting devices	A sweeping tool. Can find most radio transmitting devices as well as trace (locate) the WI-Fi and Bluetooth transmitters	<ol style="list-style-type: none"> <li>1. A part of the sweeping tool set – can be used after a standard RF detector to improve the sweeping procedure and get better sensitivity to some dangerous types of signal (GSM, 3G, Bluetooth, CDMA/LTE, Wi-Fi)</li> <li>2. Tool for detecting the illegal/prohibited use of mobile phones during negotiations, examinations, in prisons, hospitals, etc.</li> <li>3. Detection of GPS trackers on vehicles</li> </ol>
<i>Number of bargraphs</i>	1	1	6
<i>Typical detection distances<sup>i</sup></i>			
<i>Digital protocols below</i>			
<i><u>2.4GHz:</u></i>			
<i>GSM</i>	20-50 cm	20-50 cm	1-8 meters
<i>CDMA/LTE800</i>	Not detectable	Not detectable	0.5-2 meters
<i>3G</i>	Not detectable	Not detectable	0.5-2 meters
<i><u>Digital protocols on 2.4GHz and above:</u></i>			
<i>Bluetooth</i>	Not detectable	20-80 cm	20-80 cm
<i>Wi-Fi 2.4 GHz</i>	20-50 cm	0.5-2 m	0.5-2 m
<i>Wi-Fi 5.8 GHz</i>	Not detectable	10-30 cm	10-30 cm
<i>Wi-Max / LTE High</i>	Not detectable	10-30 cm	10-30 cm
<i><u>Other signals:</u></i>			
<i>VHF/UHF bug 5mW</i>	20-60 cm	20-60 cm	Not detectable
<i>Video-camera 900 MHz / 1200 MHz, 25 mW</i>	50-100 cm	50-100 cm	Not detectable
<i>Which device is suitable for detection of GPS Trackers?<sup>ii</sup></i>	GPS trackers may be installed somewhere under the bodywork or bumper, so the sensitivity of the device to signals produced at such a distance may be not sufficient	GPS trackers may be installed somewhere under the bodywork or bumper, so the sensitivity of the device to signals produced at such a distance may be not sufficient	The device is suitable for detection of GPS trackers (please refer to the User's Manual)

<sup>i</sup> Detection distance on frequencies above 800 MHz can be increased by using the optional directed antenna MWA-6; and on frequencies above 2GHz – by using the MWA-12 antenna (the antennas are supplied separately)

<sup>ii</sup> Detection of GPS Tracker is connected with detection of its exchange with the GSM/3G network. Detection of the GPS itself is impossible as the tracker acts as a receiver of GPS signals which come from satellites. Then after a route containing the GPS coordinates has been collected, it is transmitted through the GSM/3G network. The detection is possible at this stage. Please see 'How to detect GPS Trackers' in the User's Manual for the Protect 1207i.