

Even if it occurs rarely, but it cannot be excluded: **the use of jamming transmitters, also known as jammers.**

With simple analogue alarm systems in the 433 MHz range, one PMR walkie-talkie is usually sufficient to disable the alarm system. The strong signal superimposes the signals of the alarm sensors and the perpetrators can become active undisturbed.



For analogue systems in the 868 MHz range, one transmitter that transmits a continuous signal in this frequency band is sufficient, and communication between sensors and control centre is no longer possible.

This is called interference and affects all transmitters, no matter on which frequency they operate. So with one *jammer* every smartphone and every W-LAN router can be put out of action.

The Jammer are forbidden in Germany, but can be ordered freely over the Internet.

The question is therefore: How does a safety system deal with a jamming transmitter?

In order to commit a break-in using a jammer, a so-called *broadband jammer* must be used, which can be used for all Frequency bands from **315 MHz to 5 GHz simultaneously superimposed.**

These special devices are used only extremely rarely, but it would be conceivable.

AlarmTab® uses a specially developed technology to protect against jammers, which makes it possible to detect these *broadband jammers*. The AlarmTab® control center uses a variety of frequencies, in the GSM range 850 and 900 MHz, 1800 and 1900 MHz, in the UMTS and LTE range the frequency bands between 2100 and 2400 MHz, and in the W-LAN range the frequency bands 2400 and 5000 MHz.

All these frequency bands are monitored by AlarmTab® and partly used for communication. If these frequencies are disturbed by a *broadband jammer*, all radio networks fail simultaneously. This detects AlarmTab® and immediately switches to local recording mode. The internal alarm is started by means of a deflection program in the control centre, the photo and sound recording, the storage of the alarm time and the cause of the alarm.

As soon as one of the many frequencies becomes available, even if only for a few seconds, all this data is transmitted. Until the reports are transmitted, the perpetrators are actively distracted by the control centre, via video and audio.



Since no signal superposition takes place continuously and without interruption, you are best protected with AlarmTab®, even if there is a described jamming attack.