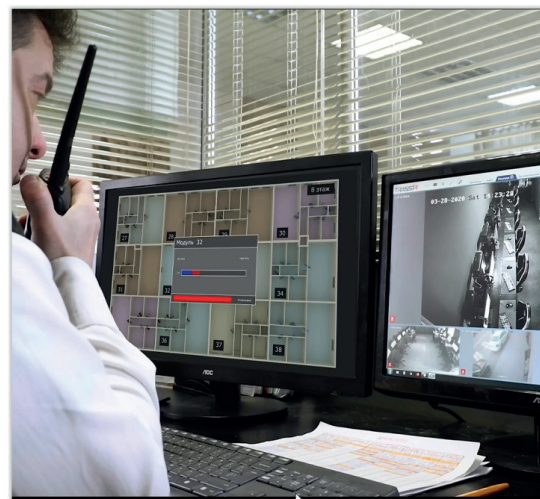# ST154
RF Monitoring System

SIGNAL-T

PURPOSE

The main purpose of the system is the detection of unauthorized transmission of data in the area of surveillance.

These areas include::

- ■ Meeting rooms and offices
- ■ Exam rooms and testing facilities
- ■ Prisons and correctional facilities
- ■ Areas with limited use of cell phones, radios, etc.

KEY FEATURES

- Simultaneous monitoring from 1 to 128 local areas.
- No special training required.
- Many opportunities for selecting the configuration of the system.
- Data transmission over wired (ETHERNET) and wireless (WLAN) networks.
- 24/7 monitoring and the event log are provided
- The location finding mode for localization the source of transmission is available, when using multiple CMs or using special SEARCH MODULE
- Automatic setting of cellular bands using by **ST181 BASE STATIONS MONITORING DEVICE**

ST154 DETECTS

- ■ Cell phones and modems of standards **2, 3, 4** and **5G**, wireless data transmission devices **WiFi, 802.1a, b n, Bluetooth** and mini-cell **DECT**
- ■ Radio transmitting devices in the range of 50-6000 MHz

GENERAL DESCRIPTION

The main unit of the system is the control module (hereinafter **CM**) which performs the reception and analysis of signals.

Detection area of the **CM** depends on many factors and the estimated average value is 10 to 50 square meters.

In addition, there is the search module (SM) that ensures determination the exact location of the radio transmission device.

DESCRIPTION OF THE CM

THERE ARE FOUR TYPES OF MODULES:

■ **ST154.A – Standalone CM** Alarm indication carried out by sound and light alarms which are located on the CM. Pre-installation parameters are set via USB port.
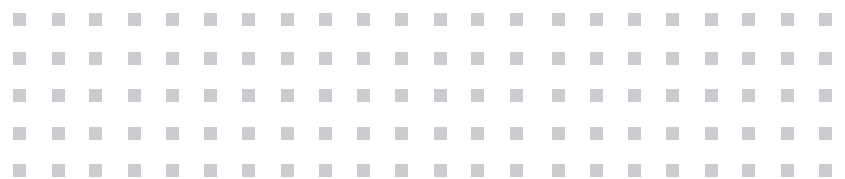
This type of **CM** is intended primarily for the control within the one room.
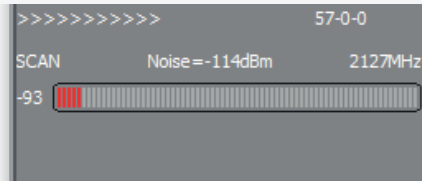
■ **ST154.W = ST154.A+ transmitting via WLAN to the PC**

■ **ST154.E - ST154.A+ transmitting via ETHERNET to the PC**

■ **ST154.E+POE = ST154.A+ transmitting via ETHERNET with POE to the PC**

This variants of **CM** are intended for cover more than one room in a multi-story building with alarm transmission on a computer.

Technical specifications of the CM:

Frequency range	50-6000 MHz
Threshold sensitivity, dBm	
CDMA450, GSM900, SM1800, 4G, 3G	-80 -100
Maximum input level, dBm	-5
Interfaces USB, WLAN, ETHERNET	
Supply voltage, V	5
Consumption current, mA, not more than	800
Dimensions without antenna mm	109x60x27

Software

Configuration of the CM can be performed both individually and for the whole system. Also there are many adjustable options.

Each CM is assigned its virtual image that allows to watch changes of the radio emission in the real-time mode.

The logging mode is always enabled and there are a lot of options of sorting events depending on criteria you need

Locating the source of the radio signal

For locating the source of the radio signal there are two ways:
• Processing data from three or more CM is available. Location of the RF device will be immediately displayed on the floor plan.

• Use the SEARCH MODULE. Information about the signal is transmitted to the SEARCH MODULE via the USB port. The search is based on the signal level indication on the screen of the SEARCH MODULE."