Radio Signal Detector
RS100-D-Lite

Product Description

The Radio Signal Detector RS100-D-Lite is a signal/spectrum analysis and visualization products which designed for 9KHz ~10GHz frequency range. It works persistently to scan the radio signals within monitoring range in working area for abnormal signal real-time discovery, intelligent identification, automatic alarm.

The device is dedicated to long-term intelligent monitoring and automatic early warning of regional electromagnetic security. It is an effective equipment to deal with eavesdropping, electromagnetic attack, electromagnetic leak and can be widely used in anti-reconnaissance, intelligence protection, institution protection scenarios.
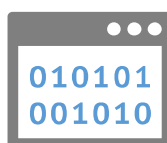
Highlights

7*24h Monitoring

200MHz Scan Bandwidth

35GHZ Real-time Scanning

Signal Feature Display

Signal Analyze

Data Storage

Instant Signal Capture

Application Scenarios

National & Public

Embassy
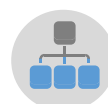
Military Base

Laboratory

Features

👍 Self-developed

- Self-developed hardware architecture、 software platform and algorithm
- Network technology and device security controllable

🎯 Wide Bandwidth & High Speed

- Instant bandwidth reach to 200MHz, widen bandwidth and jumping signal can be captured；
- Real-time scanning, fast signal capture and analyze can reach to 35GHz/s ；
- Microsecond-level signal finding and capture ability, ensure efficient data collection.
- Flexible and multiple monitoring application can be provided, including self-defined scenarios.

Network Deployment

- 7*24h persistent radio signal monitoring
- Single/multiple device network deployment with user friendly analyze platform, support multiple front/back-end data transmission methods.
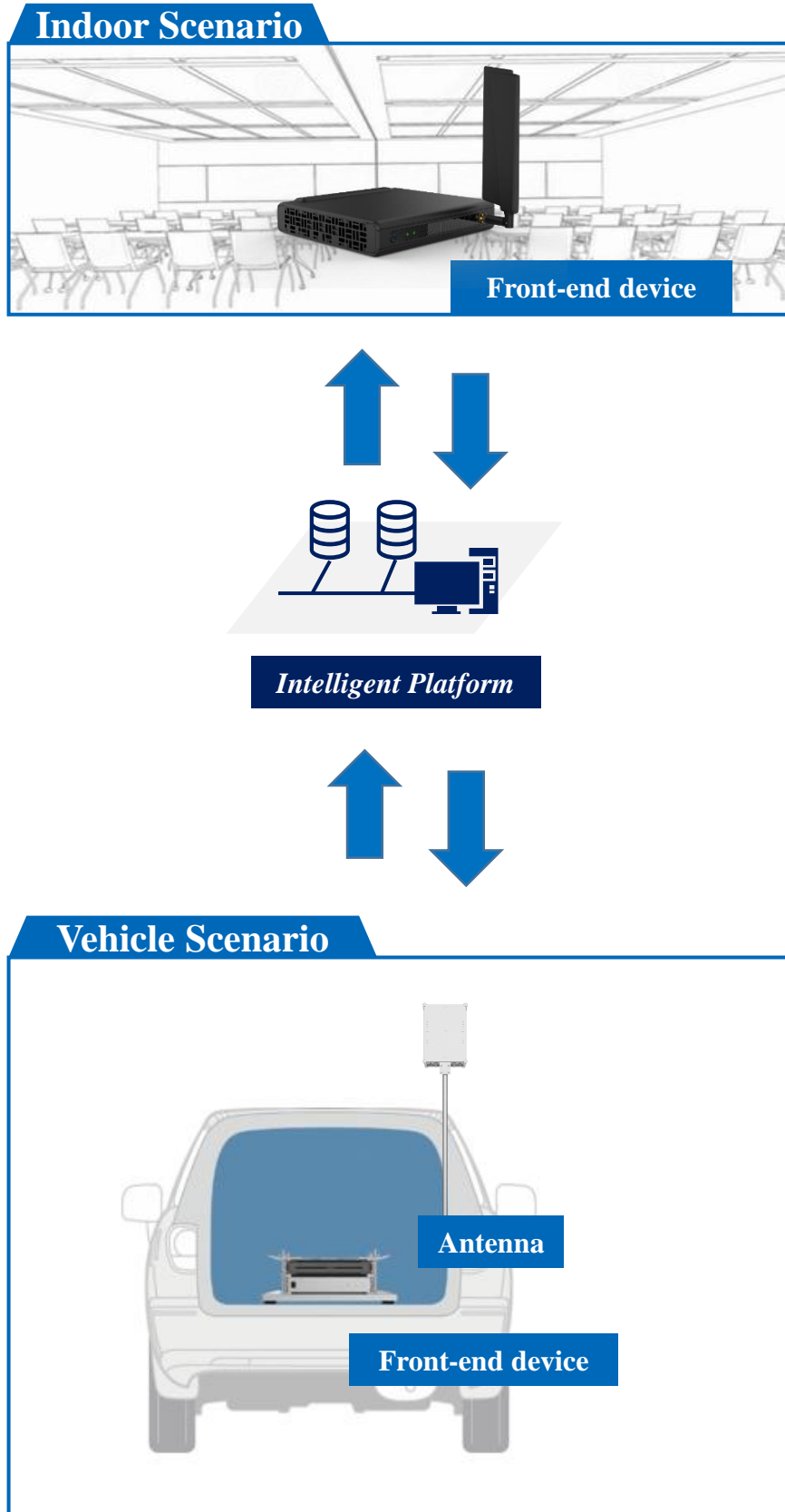- Indoor/Vehicle deployment supported.

🎯 Data Analyze

- From time period、 frequency、 background signal to visualize the signal and spectrum to platform；
- Support identify UAV、 digital TV 、 intercom、 wireless keypad and other signals, alarm will be automatically triggered once abnormal signal been detected.
- Raw data will be stored when system automatically identified abnormal signal.
- Multiple scenarios can be matched using sinovatio self-developed algorithms ；
- Support audio/video data restore.

Electromagnetic Fingerprint Library

- Build-in Electromagnetic Fingerprint Library based on operators、 broadcast TV、 WIFI/BT... etc.
- Signal will be automatically compared in Electromagnetic Fingerprint Library then identified to known signal、 suspicious signal、 other signal and can trigger alarm instantly;
- Electromagnetic fingerprint library expandable

Deployment Topology

Indoor Scenario

Front-end device

Intelligent Platform

Vehicle Scenario

Antenna

Front-end device

The real range is related with the deployed environment

Technical Parameter

Frequency Band Range

9KHz~10GHz

Real-time Scanning Bandwidth

200MHz

Detection Speed

35GHz/s

Noise Floor

-110dBm

Identification Rate

>95% when SNR>10dB

Dimension(H*W*D)

242mm*222mm*45mm

Weight(KG)

2.6KG

Tuning Resolution

1 Hz

Modulation Identification

AM、FM、ASK、PSK、FSK、QAM、OFDM ...etc
（more than 10+ format）

Audio/Video Restoration

Audio：AM、FM；
Video：AM、FM（PAL、NTSC、SECAM）

Power Consumption

45W

Interface Type

USB3.0, 1GE RJ45, 10GE SFP+