

Main competitive advantages:

- Lornet-36 has three times wider detection range compared to competitors (for example, NGO ORION).
- Lornet-36 has **no analogues in selective checkout** of a suspicious object from the distance 5-10 meters.
- A very narrow directional pattern of the antenna and a built-in pinpointing laser provide **space selective detection** of various semiconductor elements **with high precision**, which is very convenient.
- **With an interval less than 30 cm between mark points analogous competitive devices cannot locate a 3 harmonics simulator because of the masking interference of a 2 harmonics simulator, whereas LORNET 36 can locate and select both mark points at the distance of over 1 meter.**
- The device uses the **innovative technology and materials** and has a very ergonomic design. It is compact, lightweight and is very easy to use.
- The **electromagnetic influence** upon the operator is kept to the **minimum level** due to a very low duty cycle of probing pulses and decreased radiation to the operator side.
- The device uses wireless headphones, which provides the operator with free hand.
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Technical characteristics:

Probing signal mode	Pulse
Probing signal frequency range	3580-3620 MHz
Pulse signal ratio	160 pulses per second
2d harmonic receiver frequency range	7160-7240 MHz
3d harmonic receiver frequency range	10740-10860 MHz
Antenna gain at fundamental frequency	20 dB
Antenna gain at 2d harmonic	24 dB
Antenna gain at 3d harmonic	27 dB
Pulse power and duty cycle	20 W (0,6%)
EIRP (equivalent isotropic radiated power = radiated power plus antenna gain)	2000 W
2d and 3d harmonics sensitivity (antenna gain not considered)	-110 dBm
Dynamic range	> 40 dB
Antenna directional pattern width (at 1st/ 2d/ 3d harmonic)	16/ 8/ 4 degrees
Time of continuous operation at the maximum probing power	3,0 hours
Dimensions in operational	477x303x227
Fully equipped weight	1,4 kg

LORNET 36 Superhigh frequency non-linear junction detector

Unsurpassed precision
Unprecedented detection range
No analogues in selective checkout

- Probing signal mode: Pulse
- Probing signal frequency range: 3580-3620 MHz
- Pulse power and duty cycle: 20 W (0,6%)



This model defines location of the SIM card of the cell phone at distance 1 meter.



Lornet-36 is an indispensable tool for quick and reliable location of unauthorized electronic devices during search operations in premises with a high density of electronic equipment. The model was designed for **detecting devices which contain semiconductor elements** (diodes, transistors, circuits).



Lornet36 detector operation is based on the property of semiconductor components to generate a response at the 2d and 3d harmonics when radiated by an RF probing signal. The detectors analyze the 2d and 3d harmonics response of the radiated objects, which enables a quick and reliable identification of electronic devices and natural oxide semiconductors.

Application

The model is widely used when detecting electronic eavesdropping devices as well as remote control units of improvised explosive devices, which contain **semiconductor elements** (diodes, transistors, circuits). Nonlinear junction locator is a compulsory device for any technical security service and corresponding offices in law-enforcement agencies.

- Lornet-36 is very effective when it comes to identify miniaturized electronic devices (10x20mm) at a considerable distance, which is sometimes crucial when a suspicious object is to be analyzed from a safety range.
- Building on a very high probing signal frequency and a very narrow antenna directional pattern the NL JD Lornet-36 is dramatically superior to any competitive instrument in the industry in terms of detection range, selectivity and positioning accuracy.
- The use of superhigh frequency range gives Lornet-36 some unique capabilities of detecting semiconductors hidden by different materials. It can detect semiconductors through slits and holes, ungrounded shielding, by means of reflection from a smooth surface etc.