

Rascan-5/7000

Portable holographic radar system

Radar produces plan view gray scale images of the subsurface objects using five simultaneous frequencies

RASCAN-5/7000 is intended for sounding structural components of buildings (brickwork, wall panels, cast in place concrete and reinforced concrete, etc.) for detection of buried objects (wiring, reinforcement, voids, various kinds of discontinuities and foreign bodies). Software forms representation of the internal structure of examination area. Received images can be focused by special algorithms for improving their resolution.



Technical characteristics

Maximum sounding depth (depends on medium properties), mm:	75
- in concrete	150
- in brick wall	180
- in wall board	180
- in wood	1.5
Resolution in plane of sounding at shallow depths, cm	5
Number of frequencies	< 10
Transmitter power, mW	< 3
Power source, W	
Supply voltage, V	
AC	100-230 (50-60 Hz)
DC	12
Dimensions, mm:	
Control unit	157 x 63 x 200
Head	95 x 148 x 119
Weight, kg	1.9
Productivity, m ² per hour	4..6
Operating temperature, °C	+10...+35
Relative humidity, %	< 90

Results of Rascan operation:



Word "RASCAN" cut from aluminum foil, under 6 cm of foamed concrete (frequency is 6.6 GHz)



Two reinforcement rods in concrete (depth is 11 cm, distance between rods is 8 cm, frequency is 6.6 GHz)

Joint use of Lornet-24 and Rascan 5/7000

facilitates and accelerates search operations

Note! RASCAN (holographic radar system) is the best supplementary exploration tool of Lorent-24 (compact non-linear junction detector of examination type).

A non-linear junction detector Lornet-24 is used while conducting strategic and search work afield, in rooms, transport, and is designed to find special equipment containing semiconductor components. An automatic system of frequency selection is integrated into the device, and it can tune away from narrowband interference automatically (by a criterion of minimum noise of the receiving channel of the 2nd harmonic).

They are an ideal combination owing to the fact that Lornet allows promptly localize areas of device placement, and RASCAN then allows getting the accurate picture of the selected areas. That could help to save much time and make the searching more effective! You will be able to provide high-end and incomparable service!

The detection of objects boils down to two steps:

1. prompt localization of devices placement areas with Lornet-24
2. getting the accurate image of the selected areas with Rascan-5/7000



RASCAN with Lornet-24 will be useful in the following areas:

- Counterintelligence activities for detecting of bugging devices;
- Operative inquiry activities of law-enforcement agencies;
- Surveying of building structures for determining the position of defects, reinforcement, voids and other heterogeneities;
- Inspection of the objects of culture heritage.