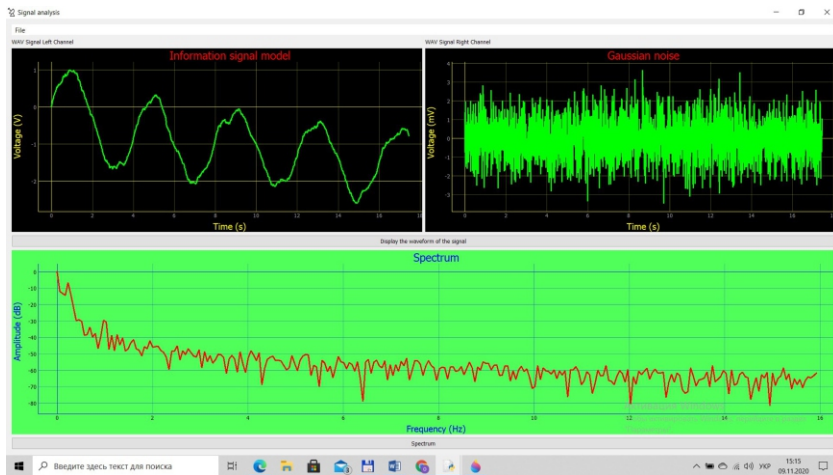
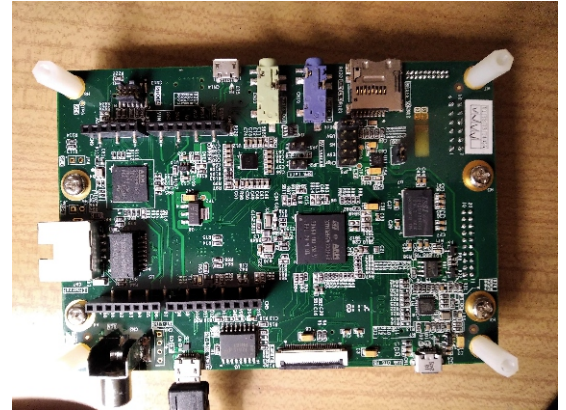


MULTIFUNCTIONAL RADAR FOR ANTI-TERRORIST AND SEARCH-AND-RESCUE OPERATIONS



View of the radar interface



General view of the radar
signal processing unit

Specification

Frequency and: 1,5...3 GHz
Average transmitter power: >100-150,0 mW
Receiver sensitivity: minus 170 dB/W
Type of radiation: Continuous
Modulation: Mersen code phase manipulatio
Antenna beam width: 200-300
Range Resolution: 1...1,5m.
Dopler Resolution: 0,1...0,5 Hz.
(Depending on the type of interference)

Stage of Development

IRL3

IPR Protection

TRL4

Areas of Application

The radar system is a portable Doppler radar with a short radius of action with high spatial-temporal resolution. It uses a pseudo-random sequence of phase-coded pulses as a sounding signal. The use of this radar can significantly increase the effectiveness of antiterrorist operations and search and rescue works at natural disasters, man-made disasters, mine-rescue work due to the rapid detection of alive people, covered by optically non-transparent obstacles. The device also reduces the cost of protecting objects with restricted access due to latent monitoring of the objects.

Advantages

Unlike the known devices of this kind, the radar provides a reliable (with a probability of 0,85 ... 0,95) detection of an alive human being under the obstacles of thickness to 1 m.

Contacts

Logvinov Yuriy Fedorovich; O.Ya.Usikov Institute of Radiophysics and Electronics, National Academy of Sciences of Ukraine; +38-057-315-20-09; logvinov@ire.kharkov.ua