

## MULTI-ELEMENT DETECTORS OF SUB-THz RADIATION

### Areas of Application

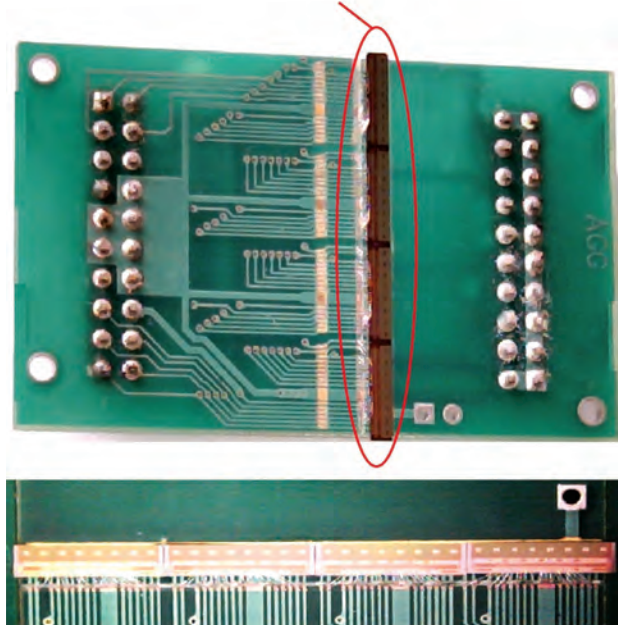
The device is to be used in security systems of postal items, railway and subway stations, airport terminals for inspecting the content of packages/containers that are transparent in the sub-THz spectral region (paper, plastic, foamed plastic, gypsum plasterboard, dry wood, and footwear soles, etc.)

### Specification

Format of detectors: linear array of 32 or 80 pixels; can be designed based on customer requirements (linear or matrix array).

External sub-THz radiation source needed, mW	~25
Radiation frequency region, GHz	35–300
Line scanning frequency, Hz	200
Dynamical range, dB	≥40

32-element linear array



### Advantages

There are no analogs in Ukraine. The devices are cheaper as compared with the foreign counterparts

Stage of Development.  
Suggestions for Commercialization  
IRL4, TRL3  
Sample manufacture, upon request

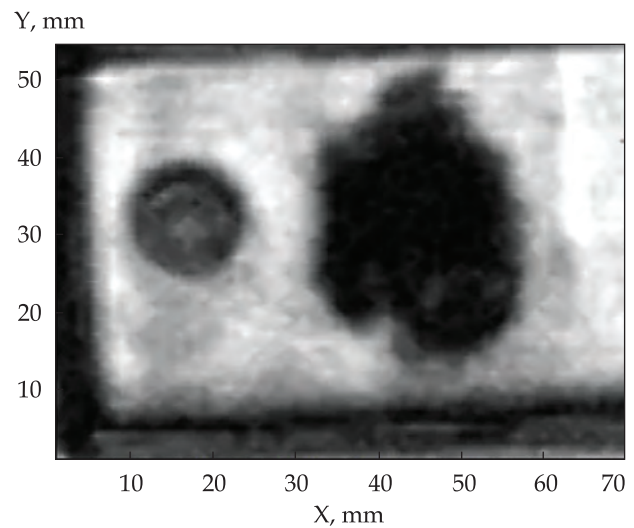


Image of items in plastic foam container at a radiation frequency  $\nu = 140$  GHz

IPR Protection  
IPR1, IPR2

### Contact Information

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