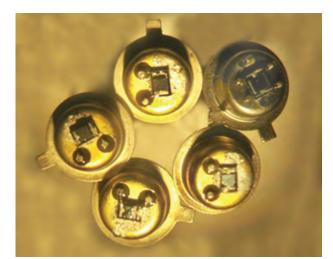
# **INFRARED RADIATION SENSORS**





Uncooled InAs photodiode prototypes

#### **Areas of Application**

The sensors are to be used at R&D laboratories and metallurgical plants for registration of infrared radiation in the spectral range of  $3-5 \mu m$ , and in optoelectronic devices for monitoring hazardous and explosive gases

## **Specification**

Parameters	Values of technical parameters	
	InAs	InSb
Operating mode:	Photovoltage	
Operating temperature, K	77, 300	77
Spectral band, µm	1.5-3.1 (77 K) 1.5-3.7 (300 K)	1.5-5.3
Peak wavelength, μm	2.9-3.0 (77 K) 3.4-3.5 (300 K)	5.2
Current sensitivity, A/W	1.2 (77 K) 0.8 (300 K)	2.2
Specific detectivity at the peak wavelength, $\rm cm~Hz^{1/2}~W^{-1}$	5 · 10 <sup>11</sup> (77 K) 2 · 10 <sup>9</sup> (300 K)	4.8 · 10 <sup>10</sup>



Optical cryostat with germanium window for cooled InAs and InSb photodiodes

## Stage of Development. Suggestions for Commercialization

IRL5, TRL4 Manufactured and sold, upon request

# **Advantages**

The sensors have no analogs in Ukraine and are import-substituting products. As compared with commercial photodiodes produced by leading manufacturers of similar products, they have a lower cost at comparable threshold parameters

IPR Protection IPR1, IPR3

#### **Contact Information**

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