



1 *Bi-spectral infrared detectors can reliably identify threats directly from an airplane.*

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2 *Connected with a front end chip, the detector is a functioning image sensor.*

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## INFRARED DETECTORS FOR ALERTING SENSORS

The bi-spectral InAs/GaSb superlattice detectors, developed at the Fraunhofer IAF, are the only ones of this design which can provide infrared images with spectral information as they can see in color. Thereby they can reliably distinguish hot CO<sub>2</sub> in plumes from interfering signals such as sunlight – even in front of a moving background, as perceived by an aircraft in flight.

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### Features

- Simultaneous and co-located detection of infrared radiation in different wavelengths
- Two separate spectral channels (3 – 4 μm und 4 – 5 μm)
- Detection of hot CO<sub>2</sub>
- Suppression of sun light reflections and clutter
- High thermal resolution

### Applications

- Warning sensors for the protection of aircrafts
- Process monitoring
- Climate Research
- Environmental protection