



## ALICE - HIGH PERFORMANCE UNCOOLED THERMAL IMAGER CORE

The Uncooled Thermal Imager Core (UTIC) is an electrooptical engine based on the state of art of Vanadium Oxide microbolometer high resolution (640 x 480) focal planes. Dedicated A/D conversion and processing electronics, developed by SELEX GALILEO, allows on board processing capability to attain the best image quality.

The advantages of the uncooled IR technology allows to avoid cryocooling devices, resulting in reduction of weight, size and power consumption of the thermal imager, and with improvement of the reliability.

The UTIC is composed by a Detector Module and a processing module including Power Supply.

The UTIC module is a perfect solution for many applications like vehicle driver scope and gun sights, where small size and low cost devices are requested.

### KEY FEATURES

- High performance LWIR uncooled core.
- Lightweight compact design.
- Low power consumption.
- Ease of system integration.
- Flexible video out and control interface.
- Programmable configuration.
- Auto or Manual gain and offset.
- Programmable gain and offset region.
- Auto calibration at startup.
- User programmable text display and symbols.
- Freeze frame.
- Four programmable correction tables.
- Auto calibration mode based on residual non-uniformity evaluation.
- Color text and graphics in video electronics standard association mode.
- Military specification compliant.

## ALICE - High Performance Uncooled Thermal Imager core

### TECHNICAL CHARACTERISTICS

Weight:	< 200 g (without optics)
Sensitivity:	< 50 mK typical
Power consumption:	4 watts operating
Operating waveband:	8 - 14 $\mu\text{m}$
Resolution:	640 x 480
Horizontal FOV:	selectable by optics
Video output:	Multi standard: NTSC 525 lines 60 Hz VGA 640 x 480 60 Hz Digital video 14 bit (full dynamic - available also raw sensor data)
Power supply:	adaptable external VDC, high performance rechargeable Lithium ion batteries
Operating temperature:	-32° ÷ +55° C
User control	Ergonomic and detachable command interface RS232 / RS422