



ALICE - HIGH PERFORMANCE UNCOOLED THERMAL IMAGER CORE

The Uncooled Thermal Imager Core (UTIC) is an electro-optical engine based on state-of-the-art 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 InfraRed (IR) technology means that there is no need for cryo-cooling devices, resulting in a reduction in weight, size and power consumption of the thermal imager, and with an overall improvement to reliability.

The UTIC is composed of 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 required.

KEY FEATURES

- High performance Long Wave InfraRed (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 start-up
- User programmable text display and symbols
- Freeze frame
- Four programmable correction tables
- Auto calibration mode based on residual non-uniformity evaluation
- Colour text and graphics in video electronics standard association mode
- Military specification compliant.

TECHNICAL CHARACTERISTICS

Weight	< 200 g (without optics)
Sensitivity	< 50 mK typical
Power Consumption	4 watts operating
Operating Waveband	8 - 14 μ m
Resolution	640 x 480
Horizontal Field Of View (FOV)	selectable by optics
Video Output	Multi standard: NTSC 525 lines 60 HzVGA 640 x 480 60 HzDigital video 14 bit (fully dynamic- available also for 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