

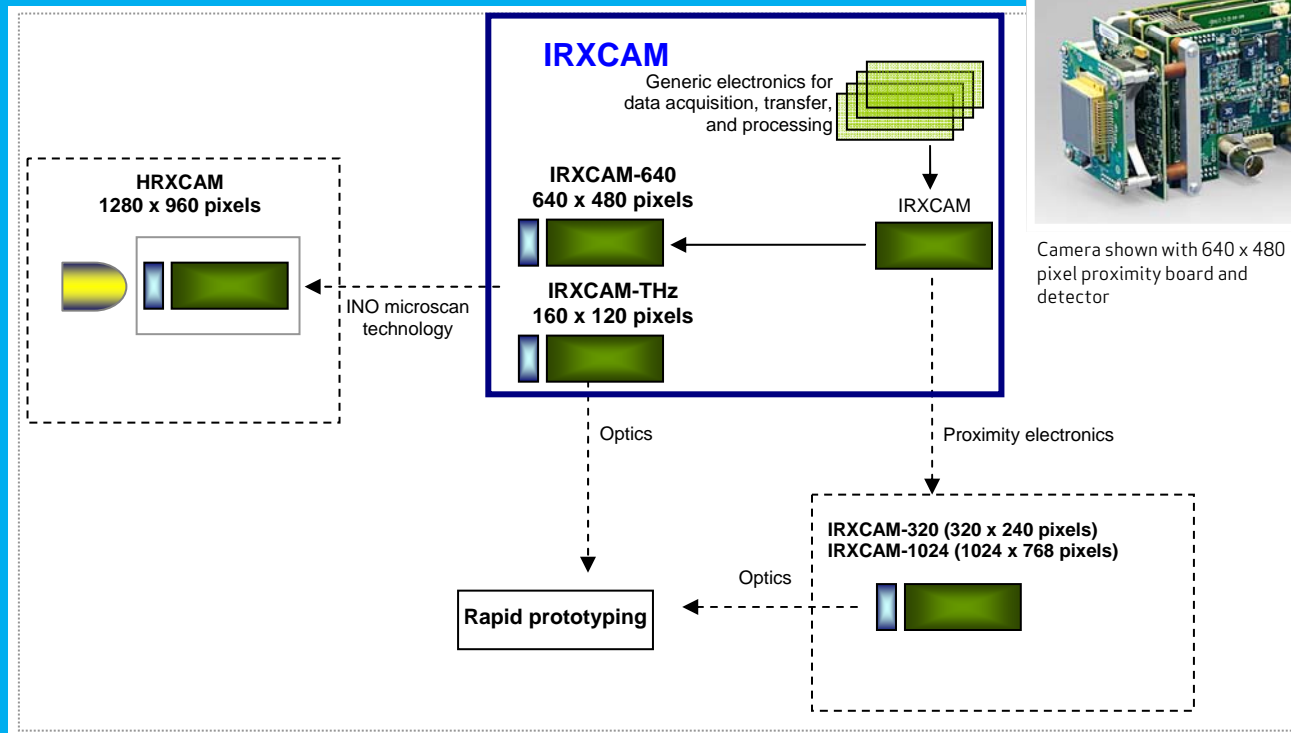
IRXCAM-THz

CAMERA MODULE

The IRXCAM-THz camera core is a flexible module based on INO's 160 x 120 pixel uncooled FPA optimized for the THz waveband. Providing 16-bit raw signal outputs at 30 Hz, the electronics provides total access to the detector configuration parameters.

The output is available in GigE. TECless operation minimizes power consumption. If required for absolute measurements, a TEC integrated with the detector package can be controlled. The camera core can be configured for outdoor operation from -30°C to 55°C. Random access capability provides flexibility in frame frequency and operating field of view. The core can be provided with 44 mm focal length optics optimized for the THz region.

GENERAL ARCHITECTURE



The IRXCAM main module is composed of a set of electronic boards that handle raw data acquisition and processing, final data formatting, synchronization with an external source, and data transfer according to various standards. The module is equipped with a Gigabit Ethernet link for a computer. The FPA is mounted on proximity electronics that are adaptable to various FPAs.



CHALLENGING LIGHT
FOR OUR PARTNERS

IRXCAM-THz

CAMERA MODULE

PRELIMINARY TECHNICAL SPECIFICATIONS

SENSOR	<ul style="list-style-type: none"> . 160 x 120 pixels uncooled . INO IRM160A . Microbolometer FPA . Silicon float zone window . Optimized for 3 THz; other spectral regions available
VIDEO OUTPUT	<ul style="list-style-type: none"> GigE Link . RJ-45 connector . Raw data image
CONTROL	<ul style="list-style-type: none"> GigE Link . System operation control . Loading of parameters & calibration tables . Random access
OPTIONS	Ext. trigger input (opto-isolated)
POWER SUPPLY	9-12V DC
POWER CONSUMPTION	With GigE Link: < 7.8W
DIMENSIONS	65 mm (H) x 59 mm (W) x 105 mm (L)
WEIGHT	~230g
TEMPERATURE	<ul style="list-style-type: none"> . Operating: -30 to 55°C . Storage: -40 to 80°C
EXTENSION	<ul style="list-style-type: none"> . Interface for microscan driver . Push buttons (x3) . Quadrature encoder (x1)

**Subject to change.*

INO is a world-class center of expertise in industrial applications for optics and photonics, and a leading technology developer and provider of bolometers and IR module technologies.

COMM-100128