

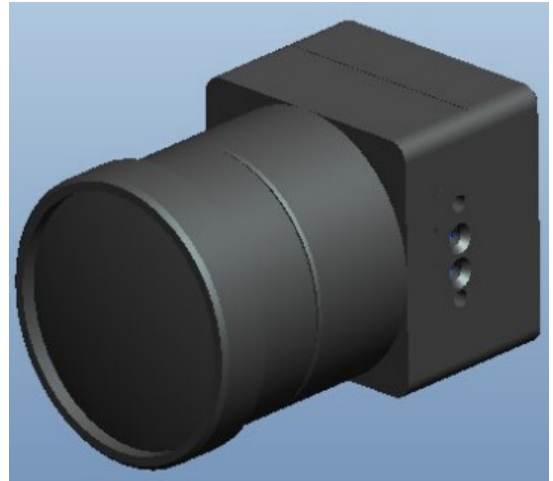
## Overview

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The TCC-LW640-17 Thermal Camera Core is a compact product designed for surveillance in total darkness or temperature measurement applications.

The TCC-LW640-17 Thermal Camera Core consists of a 640 x 480 uncooled Amorphous silicon (ASi) micro bolometer detector and imaging processing electronics which can be used as a core device for thermal cameras. It provides high quality infrared images by detecting the 8 to 14  $\mu\text{m}$  LWIR wavelength.

Cantronic's expertise in this technology provides a complete night vision solution with a full spectrum of infrared wavelength.



## Key Features

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- Compact and light weight LWIR thermal camera core
- 640 x 480 uncooled ASi detector
- Surveillance/Temperature measurement switchable
- Control via RS-232C interface for contrast, brightness, polarity, digital zoom and FPN correction
- Thermal seeking, passive infrared
- Long operating life with no cooler required

## Applications

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This unique system of night vision power is Cantronic's solution to an increased need for security and homeland protection for broad range of facilities and infrastructure such as:

- Border/Perimeter Patrol
- Forest Fire/Temperature Measure
- Law Enforcement Agencies
- Day/Night Scouting
- Hunting and Theft



### Specifications

Detector type	Amorphous silicon micro bolometer infrared (No TEC)
Resolution / pixel pitch	640 x 480 / 17um
NETD	≤ 50mk at f/1.0 300K
Frame rate	50Hz
Wavelength	8 to 14 um
NUC	Adaptive non-uniformity correction
Boot time	< 3s
Image enhancement	DDE
Image display resolution	768 x 576
Lens (optional)	Available Lens: 12mm, 19mm, 35mm, 40mm, 50mm
Polarity	Black hot or White hot
Digital zoom	x2, x4
Image flip	Horizontal / vertical
Cursor	"+" Cross cursor
Operating voltage range	DC: +2.5V to +5.5V
Typical operating voltage	DC: 3.7V
Power consumption	<1.0W
Operating temperature range	Commercial: -20°C to +60°C Special purpose: -40°C to +60°C
Humidity	5% to 95% No condensation
Anti-shock and vibration	MIL-STD-810F
Weight	33g
Circuit board size	24mm x 24mm
Dimensions	27mm x 28mm x 33mm (H x W x L)
Digital image output	16 bit (50Hz) / BT.656 format or customized format
Interface	RS232 control, BNC-Composite video, Five way button



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