

CST-Solo (S640) Thermal Imaging Camera

PRODUCT HIGHLIGHTS

The CST-SOLO (S640) thermal focal plane array delivers 640X480 resolution with a 10-micron pitch, enabling system engineers to achieve an ideal SWaP compared to 17- or 12-micron focal planes. Designed for industrial, aerospace, and commercial thermal imaging applications, the CST-Solo (S640) offers high-performance at a cost effective price, making it an ideal choice for developers seeking advanced yet efficient thermal solutions.

Features:

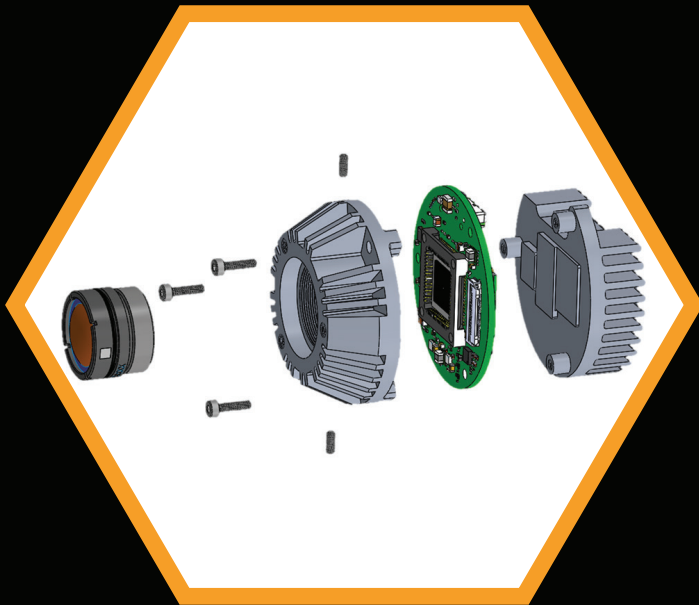
- 10 μ m VOX detector
- VGA 640x480 resolution
- Lower-power -1.1W operation
- Affordable performance
- Enables Mobile and Compact systems
- Available with or without high performance lens configurations
- Optional AI capabilities for Smart and autonomous applications



Specifications

Imaging Core

Array Size	640x480
Pixel Pitch	10µm
Spectral Band	8-14µm
Sensitivity (NETd) @ f/1.0 @ Room Temperature	<50 mk
Frame Rates	60 fps / 30 fps / 9 fps
Digital Video	MIPI or CameraLink
Non-Uniformity Correction	Shutterless 1-point
Input Voltage	10 to 14 V DC
Available Command Protocols	UART
AGC	Automatic
Weight	1.6 oz w/o lense
Operating Temp Range	-40°F to 70°F (-40°F to 158°F)
Standards Compliance	ROHS



*Optional Smart feature

Detector Parameters

640X480 @ 10µm

Parameter	Notes	Description						
Part Number		7100306	7100301	7100340	7100350	7100349	7100383	Unit
F/#	Aperture	1.3	1.0	1.2	1.0	1.3	1.0	
Field of View	Vertical	44	44	18	18	9.2	7.8	deg
	Horizontal	59.7	59.5	24.6	24.6	12.3	10.4	deg
	Diagonal	76	76	31	31	15	13	deg
EFL	Magnification	6.3	6.4	15.0	15.0	30.0	35.0	mm