

VOx Imager - Video Engine

SCD's 17 μ m VOx Microbolometer technology is the ideal choice for any LWIR VGA system. With its exceptional image quality, ultra-low NETD, rapid imaging capability, and low weight, SCD's Microbolometer ranks as one of the top LWIR Video Engines on the market. Designed for applications that require minimal Size, Weight, and Power (SWaP), SCD's VOx technology offers flexible and easy-to-deploy thermal imaging solutions. SCD is always by our customers' side, providing them with the best solutions tailored to their needs.

Main Features

- Detector - VOx Microbolometer
- 17 μ m pixel pitch
- 640x480 resolution
- Advanced image enhancement and processing with unmatched performance
- High image sensitivity: NETD < 35mK @F/1,30Hz w/o NR
- Main digital video output - Glueless OLED / BT.656/ Parallel LVCMOS 8/14 bit
- Camera Link
- TEC-less and Shutter-less operation
- Time to Image - < 3 seconds
- Low SWaP
- External trigger
- Snapshoots
- Overlay graphics: Icons, text, reticles
- Evaluation Kit available - Includes VOxI, lens, and cables (power, communication, video)

Applications

- Goggles
- Rifle sights
- Unattended sensors
- Miniature payloads
- Airborne EVS
- Security and short-mid range surveillance
- Fire fighting



System	Uncooled Thermal Imager
Spectral range	8-14 μm or 3-14 μm for Broad Band configuration
Detector format	VGA, 640x480
Detector pitch	17 μm
Detector material	VOx Microbolometer
Detector package	Ceramic
Sensitivity (30 Hz, f/1,25°C)	< 35 mK with no Noise Reduction
Frame rate	9/25/30/50/60Hz
Time to image	< 3 sec
Latency	Sub frame
Power Consumption (30Hz, 25°C)	1.55W
TEC-Less operation	Yes, Temp. calibration
Video output	14 bit Parallel, BT.656, Camera Link
Optional video output	Analog video/USB3
Operation temperature	-40°C to +71°C
Storage temperature	-40°C to +85°C
Shock	500G @ 0.5msec
Size	31x31x29.7 mm
Weight	43 grams
Image correction and processing	<ul style="list-style-type: none"> ● Non Uniformity Correction (NUC) ● Bad-Pixel Replacement (BPR) ● Scene-Based NUC (SBNUC) ● Noise Reduction (NR) ● Dynamic Range Compression (DRC) ● Dome Effect Correction