VOx Imager - Video Engine

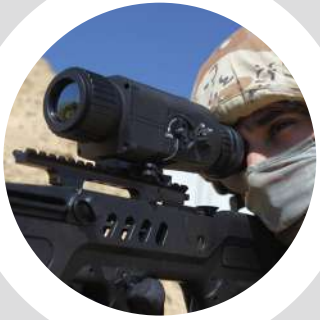
SCD's 17µm VOx Microbolometer technology is the ideal choice for any LWIR VGA system. With its exceptional image quality, ultra-low NETD, rapid imaging capability, and low weight, SCD's Microbolometer ranks as one of the top LWIR Video Engines on the market. Designed for applications that require minimal 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
- 17µm 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 3-14µm 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	**● Non Uniformity Correction (NUC)** **● Bad-Pixel Replacement (BPR)** **● Scene-Based NUC (SBNUC)** **● Noise Reduction (NR)** **● Dynamic Range Compression (DRC)** **● Dome Effect Correction**