



VOx Imager

Shock Resistant Low Power
IR Video Core

Defense Applications



General Description

For a wide range of applications; oriented for low Size, Weight and Power – SCD's VOx Imager camera module presents flexible & easy to deploy thermal imaging solution.

Applications

- Goggles
- Rifle sights
- Unattended Sensors
- Miniature Payload
- Airborne EVS
- Security and short-mid range surveillance
- Fire Fighters

Main Features

- Detector – VOx Microbolometer, 17 μ m,
- 640x480 resolution
- Exceptional image quality – NETD < 35mK @ F/1,30Hz
- Main digital video output – Glueless OLED / BT.656 / Parallel LVCMOS 8/14 bit
- Second digital video output – Camera Link: simultaneously with the Main or Configurable asVideo input
- TEC-less and Shutter-less operation
- Time to Image – < 3 seconds
- Light-weight – 43 grams
- Small form factor – 31x31x29.7mm
- Evaluation Kit available - Includes VOxI, Lens, and cables (power, communication, video)





Typical Specifications

Parameter	Value
System	Uncooled LWIR Thermal Imager
Detector format	VGA, 640x480 pixel count
Detector pitch	17 μm
Detector material	VOx Microbolometer
Detector package	Ceramic
Spectral range	8 – 14 μm
Sensitivity (30 Hz, f/1)	< 35 mK
Dynamic range	< 50K @ F#1
Frame rate	25/30 Hz (<9Hz and 50/60Hz versions available)
Time to image	< 3 sec
Latency	Sub frame
Supply Voltage	5V
TEC-Less operation	Yes
Shutter-Less operation	Yes
Video output 1 (LVCMOS)	8/14 bit Parallel, Glueless VGA AMOLED, BT.656
Video output 2 (LVDS)	Camera Link, simultaneously with the parallel output
Digital zoom	X2, X4
Polarity invert	Yes
Image flip	Horizontal and Vertical
Discrete button inputs	6
Overlay graphics	Text and Bitmap
Operation temperature	-40°C to +71°C
Storage temperature	-40°C to +85°C
Shock	500G @ 0.5msec, 500 shocks per axis and direction 1/2 sine
Size	31x31x29.7 mm
Weight	43 grams

Specifications are subject to changes without further notice