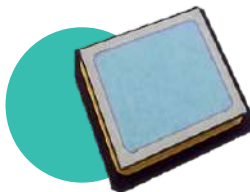


# Bird 640

SCD's advanced 17 $\mu$ m VOx Microbolometer stands out as the ideal choice for VGA LWIR systems. With its exceptional image quality, remarkably low Noise Equivalent Temperature Difference (NETD), rapid image acquisition, and minimal weight, SCD's Microbolometer ranks among the leading LWIR sensors in the market. It is suitable for a wide range of applications, specifically tailored to meet challenges associated with Size, Weight, and Power (SWaP) constraints. Leveraging SCD's VOx technology, we offer a versatile and readily deployable thermal imaging solution. Our commitment to customer support ensures that they have access to the finest solutions available.

## Main Features

- Vanadium Oxide technology
- 17 $\mu$ m pixel pitch
- 640x480 pixels focal-plane array
- Low power mode
- Ceramic or metallic package
- 2 analog outputs
- Various sensitivity levels from standard to very high sensitivity
- Option for simultaneous LWIR & MWIR on a single FPA (Broad-Band)



## Applications

- Goggles
- Remote Weapon Stations
- Miniature payloads
- Airborne EVS
- Security and Mid-range surveillance
- Driving Vision Enhancement (DVE)



	Bird 640 Ceramic			Bird 640 Metallic
	LTTC Low Thermal Time Constant	HS High Sensitivity	BB Broad Band	HS High Sensitivity
Technology	VOx Microbolometer			
Format	640 x 480			
Pitch	17µm			
Temporal NETD@25°C F#1, 60Hz	≤55mK	≤35mK	≤26mK	≤32mK
Spectral response	8-14 µm	8-14 µm	3-14 µm	8-14 µm
Thermal time constant	7msec	14msec	14msec	14msec
Frame rate	25/30Hz, 50/60Hz, 100/120Hz			
Operating temperature	-40°C to 71°C			
Storage temperature	-40°C to 85°C			
Video output	Analog-1/ 2 lines			
Power consumption @25°C	400mW	350mW	350mW	350 mW w/o TEC
FPA stabilization	TEC-less	TEC-less	TEC-less	TEC
Size	23x26x5 mm	23x26x5 mm	23x26x5 mm	30x41x9mm
Weight	8gr	8gr	8gr	27 gr
MTTF	> 20 years @25°C vacuum life time (90% confidence)			

