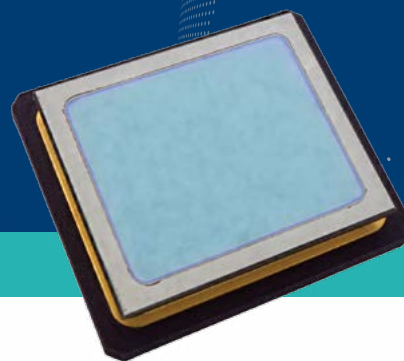




# BIRD 640-17 $\mu$ m, Ceramic

640 x 480, 17  $\mu$ m pitch,  
VOx Microbolometer,  
Ceramic TEC-less Package



## General Description

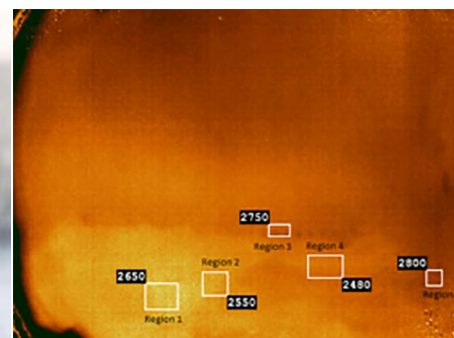
The Bird 640, 17  $\mu$ m detectors are a family of compact, low SWaP-C, VGA-format detectors in a ceramic package available in a variety of sensitivity levels and suitable for the most demanding military and HLS applications. Suited and field tested for TWS and hand-held applications.

## Applications

- Thermal Weapon-Sights (TWS)
- Assault Rifles and Long Range Snipers
- Remote Weapon Stations (RWS)
- Miniature Payloads
- Driver Vision Enhancement (DVE)
- Security and Mid Range Surveillance
- Industrial Applications
- Gas Sensing
- Instrumentation

## Main Features

- TEC-less
- Various sensitivity versions (<50 to <22 mk)
- Low Power
- Internal factory NUC
- Ceramic Package
- Option for simultaneously LWIR & MWIR on a single FPA (Broad-Band)
- Superior sensitivity allows operation at higher F#'s (up to F#/2)





## Typical Performance

Parameter	STD	HS	BB	VHS
Technology	VOx Microbolometer			
Format	640 x 480			
Pitch	17µm			
Temporal NETD@25C, F#1, 60Hz	<50mK	≤35mK	<35mK	<22mK
Spectral Response	8-14 µm	8-14 µm	3-14 µm	8-14 and 3-14 µm
Tau	10mS	14mS	14mS	18mS
Typical Response	9mV/°K	13mV/°K	13mV/°K	16mV/°K
Operability	>99.5%			
Frame Rate	Option of 30Hz, 60Hz, or 120Hz			
Digital Inputs	1.8 V			
Output Range	1.5V + 1V			
Operating Temperature	-40°C to 85°C			
Video Outputs (analog)	1 channel @ 60Hz 2 channels @ 120Hz			
Power Dissipation (Room temp)	@ room temperature <320 mW@60 Hz			
Packaging	Ceramic			
Weight	7 grams			
Size	26 x 23 x 5 mm			

Specifications are subject to change



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