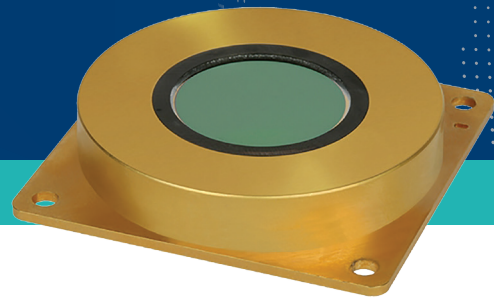




Bird Xga

1024 x 768, 17 μ m pixel pitch
VOx Microbolometer

Defense Applications



General Description

Bird XGA is a large format of uncooled LW IR detector, specially designed to address high-end, high performance applications. The detector ROIC integrates a low-noise high sensitivity and wide dynamic range.

Bird XGA is enhanced with the cutting edge Vanadium-Oxide technology, thus providing the ultimate sensor device for both military and civil applications.

Applications

- Long-range surveillance systems
- MWS
- Remote weapon station
- Long-range flame detection
- Driver's night-vision systems
- EO/IR tactical payloads

Main Features

- Vanadium Oxide technology
- Uncooled operation with TEC
- 4 analog outputs
- Rolling mode bottom-to-top scanning
- 1024x768 pixels focal-plane array
- 17 μ m pixel pitch
- Internally computed coarse-NUC (optionally also R/W)
- Adjustable GAIN & Integration time
- Parallel/Serial communication
- Built-in (CMOS) FPA temperature diode gauge 6mV/K
- Mil-std qualification





Typical Performance

Parameter	Performance
Spectral Response	8μm-14μm. Also available at 3-14μm
Array Format	1024 x 768
Nominal Frame-Rate	60Hz
Video Output Span	2V (0.5V÷2.5V)
Power Supplies	Bolometer 6.5V; Video O/P 5.5V; Digital 1.8V
Power DissipationSC	700mW (@60Hz frame rate, 25°C FPA Temp)
Temporal NETD	<35mK (F#/1, 25°C FPA Temp, 60Hz frame rate)
Thermal Time Constant	8-14mSec
Dynamic Range	130°C for fast detector, 100°C for HS version
Response	5mV/K and above
Pixel Operability	99.5%
FPA Temp. control	Thermo-Electric-Cooler
Size	52mm X 52mm X 11mm (excluding pins & vacuum tube)
Weight	70 gr
Operating Temp	-40°C to 71°C
Storage Temp	-40°C to 85°C
Vacuum Life Time	20 years (at 25°C Storage temp)