

# Uncooled Infrared Detector

LWIR 1024 x 768 12 $\mu$ m

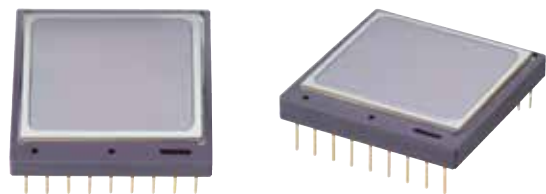
DB1024-12C-A

## Overview

DB1024-12C-A is the high performance 1024 x 768, 12 $\mu$ m micro-bolometer designed for industrial-commercial thermal imagers. Our higher performance uncooled infrared detector helps infrared camera manufacturers to lead the market in thermography, surveillance & security, car night vision and many other commercial markets.

## Description

- DB1024-12C-A is an uncooled infrared detector with a reliable, small and lightweight, low input power focal plane array.



Ceramic Package

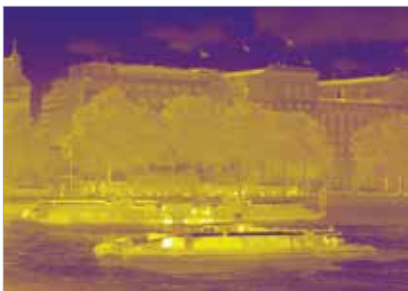
## Main Features

- TEClass operation
- Power supply: 5V for analog and digital
- Output dynamic range: 1V to 4V
- Image flip/mirror capability
- 27-lead ceramic vacuum package
- On-chip temperature sensor
- Typical responsivity: 10mV/K
- User defined windowing capability

## Applications

- Security-Surveillance
- Night Vision
- Marine Navigation
- Next Generation Rifle
- Health and Medical
- Electrical Machinery Field

## Images from the 2D IR detector



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## Specifications

Performance	
Detector type	Microbolometer (uncooled)
Array format	1024 x 768
Pixel pitch	12 $\mu$ m
NETD	$\leq 50$ mK or $\leq 55$ mK@F/1, 300K, 30Hz
Operability	$\geq 99\%$
Frame rate	Max 30Hz
Video output	2ch
Thermal time constant	$\leq 15$ ms
Operating temperature	-40 $^{\circ}$ C ~ 65 $^{\circ}$ C
Features	
Wavelength band	LWIR
Spectral range	8 ~ 14 $\mu$ m
Dimensions	24(W) x 24(H) x 3.6(D)mm <sup>3</sup> (Without pin)
Weight	$\leq 7$ g
Windowing	Windowing capability

## DB1024-12C-A Dimensions

