

Blackbird 1920

The Blackbird 1920 represents a state-of-the-art Mid-Wave Infrared (MWIR) detector, featuring a 3 Megapixel Focal Plane Array (FPA) in a 1920x1536 pixel format with a 10µm pitch. This FPA utilizes SCD's well-established Indium Antimonide (InSb) technology, combined with a digital readout circuit developed through an advanced CMOS process. The result is a very large format detector that offers exceptional image quality, a high frame rate, and a relatively compact size. SCD remains committed to standing alongside our customers, providing them with the best solutions tailored to their needs.

Main Features

- High sensitivity: characterized by low readout noise, low dark current, and high quantum efficiency
- High frame rate: greater than or equal to 90 Hz in full frame
- Simplified electronic interface

Applications

- Persistent surveillance
- Long/medium range surveillance & targeting
- IRST
- Airborne Payloads
- MWS



Technology	InSb
Detector format	1920x1536, 10µm
Cooler options	Rotary integral / Split
Spectral band	1-5.4 µm
Operating temperature	80K
Length (optical axis)	150 mm
Weight	1.1 Kg
Cooler power consumption	18W
Proximity electronics power consumption	4.5W
NETD (2.5Me- Cap.)	< 28mK at 70% well fill
Maximal frame rate (full format, 4 video ports)	≥ 120Hz
Advanced ROIC functionality	Binning, Windowing

