

Meeting Today's Challenges to Provide a Secure Future



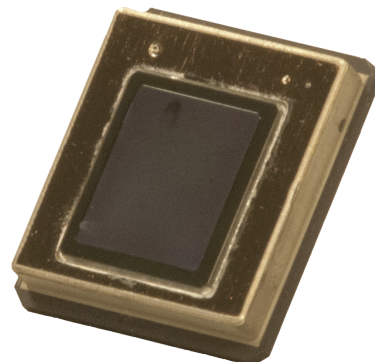
U6160

The advanced U6160 thermal imaging detector from DRS Technologies produces superior video image quality in a very compact package that weighs less than 13 grams. This innovative vanadium-oxide, long-wave infrared detector generates images with a resolution of 640 x 480 pixels. No previous detector has produced such a high-resolution image in such a small sensor or with a sensor that is so light in weight. The U6160 measures just 3.0 x 2.6 x 0.64 cm.

The U6160 is built with ruggedized, environmentally sealed packaging. Its on-chip temperature feedback technology enables the U6160 to operate without the need for a thermoelectric cooler.

Its lightweight, compact form make the U6160 a powerful choice for use onboard unmanned aerial vehicles and for troops operating on foot, and it is an increasingly popular technology for new devices where reduced size and weight are crucial.

- Weighs less than 13 grams
- Measures just 3.0 x 2.6 x 0.64 cm
- Smaller and lighter than any earlier detectors
- Ruggedized and environmentally sealed
- 17 micron pixel pitch focal plane array



SYSTEM FEATURES

FOCAL PLANE ARRAY

Detector Type	Uncooled VOx Microbolometer
Array Size	640 x 480
Detector Pitch	17 μ m
Spectral Response	LWIR 8 - 14 μ m

VIDEO

Frame Rate	30 Hz
Nominal Data Rate	10 MHz
Format	NTSC/PAL Compatible

ELECTRICAL

Power	\leq 220 mW Nominal
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PART NUMBER

5013600-001

PERFORMANCE

Sensitivity (NETD)	<40 mK @ F/1
Multiplexer	CMOS Ripple Integration
Area Fill Factor	90%
Typical Operability	>99%
Number of Analog Outputs	1
Output Voltage Range	1.2 - 3.2 v
Time Constant	\leq 14 msec
Temperature Stabilization	No TEC required (On-Chip Temperature Feedback)
On-chip Non Uniformity Correction (NUC)	7 bits parallel

MECHANICAL

Dimensions (L x W x H)	3.0 x 2.60 x 0.64 cm (1.2 x 1.0 x 0.25 inches)
Weight	\leq 13 g

ENVIRONMENTAL

Operating Temperature	-40°C to +85°C
Storage Temperature	-46°C to +85°C

* Specifications subject to change without notice. Export of the commodities described herein is strictly prohibited without a valid export license issued by the U.S. Department of State, Directorate of Defense Trade Controls, prescribed in the International Traffic in Arms Regulations (ITAR), Title 22, Code of Federal Regulations, Parts 120-130.