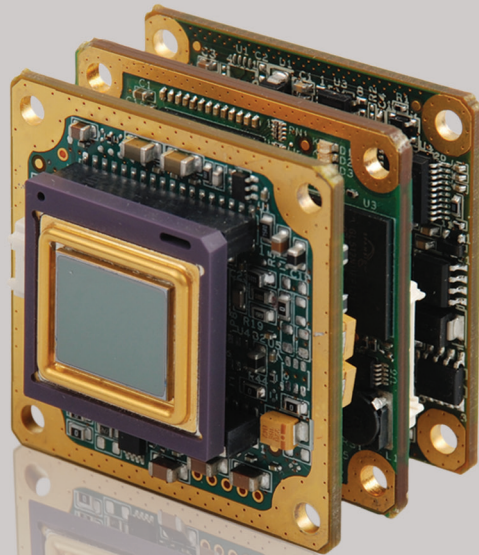


# Opgal EyeR™ 640 (17μm pitch detector)



## Engine Applications



### Introducing the New Generation Uncooled Thermal Imaging Engine



Opgal's next generation 17μm micro bolometer thermal imaging engine platform is especially designed for better, smaller, cheaper integration by OEM clients who gain VGA resolution. With an advanced, DSP-based platform, the engine supports a 17μm ASi microbolometer detectors of a 640x480 format.



# EyeR 640 17µm Specifications



Engine Applications

## Flexibility

Opgal designed this off-the-shelf engine for easy integration to the specific needs of OEM clients and a large variety of dual use applications. Software and firmware modules can be easily developed and modified to any specifications. Due to the engine's user - friendly interface and attractive size, it can be integrated cost-effectively into small-size applications, a key marketing advantage for dual use applications. The EyeR 640 supports the most advanced motorized lenses based on continuous zoom or dual FOV and equipped with automatic focus algorithms.

## Performance

This engine offers the Opgal advantage by utilizing Opgal's best-in-class Image Processing capability, running on a DSP platform. It is designed to produce high-performance, high-resolution images, using a powerful set of signal processing algorithms.

## Power

The EyeR 640 is designed for low power consumption due to its power save design structure. Using detectors in TECLESS mode (No Thermo Electric Cooler) results in low and constant power consumption in all ambient temperatures.

## Integration

Easy system integration is the hallmark of the EyeR640. Its design supports multiple communication protocols and physical interfaces.

## Quality

This cutting-edge engine meets the strictest military standards and is designed to withstand harsh environmental conditions.

## Applications

- Weapon sights
- DVEs (Driver Viewer Enhancer)
- Weapon stations
- UAVs

## Engine Configuration Options

Features	Description/Performance
Focal Plane Array	ASi Microbolometer
Spectral Range	7.5-14 µm
Number of Pixels	640x480
Pixel Size	17 µm
Electronic Zoom	Continuous X0.9-X12
Frame Rate	25/30 Hz Max
Analog Video Output	CCIR or RS-170
Remote Control	Opgal / Pelco D over RS 232 or RS 422
Control Operation	Video Polarity, NUC, ROI
Operating Voltage	8-28 V
Power Consumption	< 2.3 W @ 25°C, 8 VDC
NETD	50° mK @ f/1 lens
Operating Temperature Range	-40°C to +60°C
Dimensions with Shutter	41x54x48.5 mm (HxWxL)
Weight with Shutter	< 120 g
Environmental Qualification	MIL- STD-810
Time to Image	< 3.5 seconds
Image Processing	NUC, BPR, time domain filter, edge enhancement, enhanced DRC, Auto Focus
Customization Options	Easy embedding of Customer Application Customizable menus, logo, colors. Customizable Graphic overlay & reticules Upgradable computing power (Optional)
Mode of Operation	Tecless

Note: Distances are calculated based on geometrical values and do not take into account atmospheric conditions