

Sii CORE



HIGH END THERMAL IMAGING VIDEO ENGINE



Sii Core (VGA, ASi) is a micro-thermal imaging solution that provides all weather vision. It has an advanced, versatile, modular 17 μ m platform that has been specially designed for civilian applications. Developed to meet extremely harsh environmental conditions, the Sii Core gives excellent high end performance and has miniature dimensions especially designed for security and mid-range surveillance products.

With features such as ultra-low power consumption, single input voltage, extremely short time to image, and built in parallel & analog video outputs, Sii core is ideal for OEM thermal imaging solutions. Its adaptable mechanical design allows maximum flexibility and easy customization. With Opgal's state of the art image processing capabilities and TECless and shutterless operations, Sii Core works without image degradation, using a highly sophisticated algorithm.

KEY BENEFITS

- **Modular and customizable**
Easy to integrate into larger systems
- **Rugged design**
For harsh environmental conditions
- **Small size**
Compact and lightweight
- **Optional shutterless technology**
No image interruption
- **Continuous digital zoom**
x1 to x12
- **High resolution uncooled thermal core**
640 x 480, 17 μ m
- **Low power consumption**
<1.2w
- **Short time to image**
<2 seconds (in shuttered configuration)
- **Operating temperature range**
-40 $^{\circ}$ C to +75 $^{\circ}$ C



APPLICATIONS

- Private Property
- Public Safety
- Law Enforcement
- Tactical Teams
- Perimeter Security
- Prisons



Features	Description/Performance
Resolution	640x480
FPA Pitch	17µm
FPA Material	ASi
NETD (F#1, 25°C)	<50mK
Analog Video Formats	PAL/NTSC
Digital Video	Camera link or BT656 / TTL
Full Frame Rate (window)	8.7Hz
Time to Image	<2 seconds (in shuttered configuration)
Power Consumption	<1.2W*
Input Power	4 - 14VDC
TEC Operation	TECless
Shutter Operation	Opgal's shutterless operation
User Configuration	SDK & GUI
Graphics	On screen menu ,text, LOGO, 32 reticles, 256 colors, color pallets
Digital Zoom (steps of 0.1/1)	Continuous digital zoom : x1 to x12
Control Interface	RS232 or 5 push buttons
Video Synchronization	Optional external video synchronization
Operating Temperature Range	-40°C to +75°C
Video Optimization	Automatic or manual AGC, video enhancement, gamma correction
Storage Temperature Range	-40°C to +85°C
Dimensions in mm (w/o lens)	33(W) x 41(H) x 25.4(L) - pagoda shutterless
Weight	<48g (pagoda shutterless)

*1.2W (when using single voltage shutterless engine configuration with digital output only)