

vumii



2018-19

Products & Systems Catalog





Opgal Optronic Industries Ltd. is a leading global provider of innovative infrared imaging systems and advanced vision and surveillance solutions. By applying advanced thermal imaging technologies with high quality components and unique design, Opgal leverages 35 years of innovation and expertise to deliver high performing versatile products with the best quality video. Opgal's security solutions deliver a broad spectrum of thermal imaging systems, electro-optics products, and complementary integrated solutions to tackle current security concerns. The Vumii™ line of products and solutions include a variety of thermal camera systems and sensors, 3rd party sensor pre-integration, and complementary solutions for threat detection, recognition and identification, night or day.

Our portfolio consists of a range of field-proven fixed and PTZ thermal cameras and systems, multi-sensor PTZ systems, multi-spectral solutions, and handheld thermal security systems.

As part of our aim to deliver an all-inclusive surveillance solution, we have pre-integrated and partnered with different technology providers to offer a variety of complementary security solutions that include radar and ground sensors integration, command and control software, and analytics for a variety of applications.

Opgal partners with its customers to provide innovative and high-quality imaging solutions. We highly value our relationships with our customers, and work tirelessly to provide the highest level of customer service. All our efforts are driven by four guiding principles: delivering innovation, quality, support, and a broad portfolio of solutions to our valued customers.



Thermal cameras passively detect the thermal energy emitted by all objects and materials. They then use that energy to generate a greyscale video image based on the differentiation between the temperature of an active body or object of interest and the background.

Threat Detection

Thermal cameras are ideal for 24/7 wide area threat detection tasks, especially when combined with video analytics.

- Wide area day/night observation
- Ideal for video analytics
- High detection rate with low false alarms
- Continuous operation day or night

Threat Recognition

Thermal and visible light imaging cameras with zoomable optics, paired with high resolution day imaging cameras, excel at threat recognition and classification tasks.

- Verification of threat type
- Determine vehicle type
- Determine the number of individual threats

Threat Identification

High resolution short wave infrared (SWIR) and multi-spectral (MWIR & SWIR) cameras use ambient light to provide clear, sharp contrast images at night or in difficult visibility conditions; ideal for surveillance applications they enable threat identification day and night.

- Detailed human detection and identification
- See through glass, fog, silicon, & other materials
- Penetrates dust, snow, fog & other harsh weather conditions
- Extremely fine details in zero light

Fire Detection Analytics

Our thermal cameras with embedded fire detection capabilities can detect a fire from a few meters away and up to 4 miles/6 kilometers away. They are versatile, reliable, and effective flame and hotspot detection systems which enhance the safety and security of infrastructure, equipment and personnel. Popular applications of these fire detection solutions include protecting private property, towns, recycling plants, waste management facilities, warehouses, wooded areas, critical infrastructure, and more.

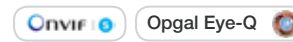
Sii AT
Athermalized Lens Thermal Camera



- **Security & Safety**
The Sii™ AT is a 24/7 security camera used for observing and monitoring sensitive sites, providing clear thermal images in total darkness and adverse weather conditions.
- **Advanced Image Processing**
Enhanced contrast video for video analytics software. Innovative signal processing makes fire and hotspot detection possible.
- **Analog or IP**
Available as a standard analog camera or with TCP/IP video and control.
- **Energy Efficient**
Less than 4w using DC or PoE power.
- **Rugged Design**
IP66 designed & certified for hot, cold, dusty and other harsh environments.
- **Hotspot / flame alerts**
Dry contact alarms via TTL, HTTP or ONVIF Profile S.

| Part Number | | Lens Size | Horizontal FOV | Lens Type | Thermal Core (Pixel Size) Resolution | Options |
|-------------|---|-----------|----------------|-----------|--------------------------------------|---------|
| CS8A17V | 🔥 | 8.5mm | 73.2° | Fixed | LWIR Uncooled (17μ) 640 x 480 | Analog |
| CS14A17V | 🔥 | 14mm | 44.0° | | | TCP/IP |
| CS19A17V | 🔥 | 19mm | 33.2° | | | 30Hz |
| CS35A17V | 🔥 | 35mm | 17.6° | | | |
| CS50A17V | 🔥 | 50mm | 12.4° | | | |
| CS60A17V | 🔥 | 60mm | 10.3° | | | |
| ES100A17V | | 100mm | 6.2° | | | |

Sii OP
Dual Sensor Thermal System



- **State of the Art**
The Sii™ OP is our most state-of-the-art detection system to date, boasting an incredibly easy installation with day and night capabilities.
- **Innovative Features**
Visible light HD and VGA / QVGA thermal channels simultaneously in one compact, feature rich unit.
- **Easy Installation**
Simple integration with new or existing infrastructures and systems.
- **Rugged Design**
IP66 rating to withstand harsh environmental conditions.
- **Opgal Eye-Q™ Image Processing**
Includes Opgal Eye-Q™, an innovative approach with highly customizable image processing that sets new standards for thermal image quality.



| Part Number 640 | Part Number 384 | Lens Size | HFOV (640) | HFOV (384) | Thermal Core (Pixel Size) Resolution | Frame Rate | Visible Light | Video Over Ethernet | Control |
|-----------------|-----------------|-----------|------------|------------|--|----------------|---|--|----------------------------|
| SOA10AV1000-HZ | SOA10AQ1000-HZ | 10mm | 59.3° | 43.5° | LWIR Uncooled (17μ) 384 x 288 or 640 x 480 | 9Hz or 25Hz | HD CMOS 640 x 480 or 1024 x 768 | Four Independent Channels of H.264, M-JPEG | ONVIF, Web UI Configurator |
| SOA14AV1000-HZ | SOA14AQ1000-HZ | 14mm | 44° | 25.7° | | | | | |
| SOA19AV1000-HZ | SOA19AQ1000-HZ | 19mm | 33.2° | 19.3° | | | | | |
| SOA25AV1000-HZ | SOA25AQ1000-HZ | 25mm | 24.8° | 14.8° | Digital zoom | | Autofocus Digital Zoom | | |
| SOA35AV1000-HZ | SOA35AQ1000-HZ | 35mm | 17.6° | 10.6° | | | | | |
| SOA50AV1000-HZ | SOA50AQ1000-HZ | 50mm | 12.4° | 7.5° | | | | | |
| SOA60AV1000-HZ | SOA60AQ1000-HZ | 60mm | 10.3° | 6.2° | | | | | |
| SOA75AV1000-HZ | SOA75AQ1000-HZ | 75mm | 8.3° | 4.9° | | | | | |

Sii ML

High Performance Thermal Camera



- Security & Safety**
The Sii™ ML is a 24/7 security camera used for medium and long-range surveillance. It delivers clear thermal images in total darkness and adverse weather conditions.
- High Performance Core and Optics**
These high sensitivity thermal cameras with continuous zoom, dual field of view, autofocus, and motorized lenses provide high contrast video, so you can quickly assess the situation on the ground.
- Simple Integration**
Embedded Pelco-D protocol and ONVIF Profile S compliant, with option for DC voltage or PoE+.
- Rugged Design**
Designed and certified to IP66, for hot, cold, dusty and other harsh environments.

| Part Number | | Lens Size | Horizontal FOV | Lens Type | Thermal Core (Pixel Size) Resolution | Options |
|-------------|---|------------|----------------|-----------------------------|---|----------------|
| ES25M17V |  | 25mm | 24.8° | Fixed FOV (Motorized Focus) | LWIR Uncooled (17μ) 640 x 480 | Analog |
| ES50M17V | | 50mm | 12.4° | | | TCP/IP |
| ES75M17V | | 75mm | 8.3° | | | 30Hz/9Hz Video |
| ES150M17V | | 150mm | 4.2° | | | |
| ES100Z17V | | 15-100mm | 42.2° - 6.2° | Continuous Zoom (Autofocus) | | |
| ES105Z17V | | 26-105mm | 23.6° - 5.9° | Continuous Zoom (Autofocus) | | |
| ES135D17V |  | 45 / 135mm | 14.3° / 4.6° | Dual FOV (Autofocus) | | |

Sii XRU

Extended Range Thermal Camera



- Innovative Uncooled Continuous Zoom**
The Sii™ XRU is a unique high resolution uncooled 25-255mm continuous zoom camera used for long range applications.
- Advanced Imaging**
Proprietary image processing and autofocus capabilities provide industry leading thermal image quality.
- Rugged Design**
Designed and certified to IP66 for operation in hot, cold, dusty, and other harsh environments.
- Low Cost of Ownership**
The advanced uncooled technology does not require the kind of regular maintenance that cooled systems require, ensuring lower cost of ownership.

| Part Number | Lens Size | Horizontal FOV | Lens Type | Thermal Core (Pixel Size) Resolution | Frame Rate | Video Types |
|-------------|------------|----------------|-----------------|--------------------------------------|------------|-------------|
| ES225Z17V | 25 - 225mm | 24.5° - 2.8° | Continuous Zoom | LWIR Uncooled (17μ) 640 x 480 | 30Hz | Analog |
| | | | Autofocus | | | |

Sii XR

Extended Range Thermal Camera



- Long Range Cooled Continuous Zoom**
Continuous zoom lens options with focal lengths up to 700mm provide detection performance beyond 20 kilometers (12 miles).
- Advanced Imaging**
Proprietary image processing and autofocus capabilities provide industry leading thermal image quality.
- Rugged Design**
Designed and certified to IP66 for operation in hot, cold, dusty, and other harsh environments.
- Multiple Output Options**
The Sii™ XR has the option of three outputs: IP, Analog, or Camera Link.

| Part Number | Lens Size | Horizontal FOV | Lens Type | Thermal Core (Pixel Size) Resolution | Frame Rate | Video Types |
|-------------|--------------|----------------|-----------------|--------------------------------------|------------|-------------|
| RS275Z15V | 19 - 275mm | 28.3° - 2.0° | Continuous Zoom | MWIR Cooled (15μ) 640 x 512 | 30Hz | Analog |
| RS300Z15V | 15 - 300mm | 35.1° - 1.8° | Autofocus | | | Camera Link |
| RS420Z15V | 21 - 420mm | 25.1° - 1.3° | | | | |
| RS700Z15V | 48.5 - 700mm | 11.9° - 0.8° | | | | |

Sii FG

Multi-Spectral Fog Vision System



- Multi-Spectral SWIR + MWIR**
Use MWIR, SWIR or fused multi-spectral setting to detect and identify security threats in extreme bad weather, including dense fog penetration.
- High Performance Imaging Properties**
Proprietary image-processing algorithms deliver high accuracy and increased situational awareness in low visibility situations.
- Highly Sensitive IR Sensor**
Provides crisp clear images at different extreme temperatures.
- Long-Range Capabilities**
Enables visibility of environmental features and long-range human detection in all weather conditions.

| Part Number 640 | Lens Size | Horizontal FOV | Lens Type | Thermal Core (Pixel Size) Resolution | Spectral Range | Number of FOV's |
|-----------------|-----------|----------------|---------------------|--------------------------------------|----------------|-----------------|
| FG16A15V-0A007 | 16mm | 34° | Fixed, Athermalized | SWIR + MWIR Cooled (15μ) 640 x 512 | 1.3μ to 4.2μ | Single FOV |
| FG100M10H-00008 | 100mm | 7.3° | Motorized | SWIR + MWIR Cooled (10μ) 1280 x 1024 | | |

Sii ST

High Performance Short Wave Infrared Camera



- **Detection & Identification**
Unique SWIR detection capabilities enables visibility through glass, fog, silicon, & other materials.
- **Athermalized Lens Configuration**
Available in several athermalized lens configurations that offer a variety of short, mid, and long-distance detection and identification.
- **Simple Integration & Control**
Compliant with Pelco-D commands with optional additional control device.
- **Small & Lightweight**
Allows it to easily integrate into larger systems.



| Part Number | Lens Size | Horizontal FOV | Lens Type | Thermal Core (Pixel Size) Resolution |
|----------------|-----------|----------------|--------------------------|--------------------------------------|
| SW08A15V-0A020 | 8mm | 71° | Athermal Lens Technology | SWIR Cooled (15μ) 640 x 512 |
| SW16A15V-0A020 | 16mm | 35.5° | | |
| SW25A15V-0A020 | 25mm | 22° | | |

Accuracii AT MINI HD

Multi-Sensor Compact Camera System



- **Dual System for Advanced 24/7 Covert Surveillance**
Accuracii AT Mini HD provides effective covert security, combining thermal and day channels on an integrated continuous 360° pan, +/-90° tilt. Detect and assess threats using both the visible light channel and the 24/7 thermal channel.
- **Dual Video Output**
View both the visible light and the thermal video channels simultaneously.
- **Simple Integration**
ONVIF Profile S PTZ compliance ensures easy integration and ease of use.
- **Compact Design**
With a compact, lightweight design, this advanced system can be integrated into any new or existing infrastructure with ease.

| Part Number | Lens Size | Horizontal FOV | Thermal Lens Type | Thermal Core (Pixel Size) Resolution | Visible Light HD Camera | Options |
|-----------------|-----------|----------------|---------------------------|--------------------------------------|-----------------------------|------------|
| ACMOV25A17V-PHD | 25mm | 24.8° | Fixed FOV Athermalized | LWIR Uncooled (17μ) 640 x 480 | Continuous Zoom 4.3 - 129mm | LED lights |
| ACMOV35A17V-PHD | 35mm | 17.6° | | | | |
| ACMOV50A17V-PHD | 50mm | 12.4° | Fixed Focus | | HFOV 57.8° - 1.7° | |
| ACMOV60A17V-PHD | 60mm | 10.3° | | | | |

Accuracii ML

High Performance Multi-Sensor Camera System



- **Detection and Observation**
Accuracii™ ML is a powerful day and night, multi-sensor system especially developed for security applications. Your choice of dual field of view or continuous zoom thermal lenses allows for wide area scene awareness and close-up threat assessment.
- **Dual Output Video**
View and/or record both video channels at the same time.
- **Simple Integration**
Available in serial or TCP/IP configurations. Compliant with Pelco-D and ONVIF Profile S.
- **Rugged Design**
Designed and certified to IP66, for hot, cold, dusty, and other harsh environments.

| Part Number | Lens Size | Horizontal FOV | Thermal Lens Type | Thermal Core (Pixel Size) Resolution | Visible Light Camera Lens Options | Visible Light HD Camera Lens Options | Options |
|-------------|------------|----------------|--------------------|--------------------------------------|-----------------------------------|--------------------------------------|---------|
| AC100Z17V | 15 - 100mm | 42.2° - 6.2° | Continuous Zoom | LWIR Uncooled (17μ) 640 x 480 | 3.4 - 122mm | 4.3 - 129mm | Analog |
| AC135D17V | 45 / 135mm | 14.3° / 4.6° | Dual Field of View | | HFOV 57.8° - 1.7° | HFOV 63.7° - 2.3° | TCP/IP |
| | | | | | | | LRF |
| | | | | | | | GPS |

Accuracii ML HD

Powerful Multi-Sensor Camera System



- Dual System for Advanced 24/7 Covert Surveillance**
A powerful day and night, multi-sensor, dual-head observation system, especially developed for security applications.
- Dual Video Output**
View both the visible light CMOS and the thermal video channels simultaneously.
- Simple Integration**
Serial or TCP/IP configurations and Pelco-D or ONVIF Profile S compliance ensures easy integration and ease of use.
- Rugged Design**
Designed and certified to IP66, hot, cold, dusty, and other harsh environments.

| Part Number Power supply: POE++ | Part Number Power supply: 24VAC/DC | Lens Size | Horizontal FOV | Thermal Lens Type | Thermal Core (Pixel Size) Resolution | Visible Light HD Sensor |
|---------------------------------------|--|------------|----------------|--------------------|---|---|
| AC100A17V1-PHDC | AC100A17V4-PHDC | 100mm | 6.2° | Athermalized | LWIR Uncooled (17μ) 640 x 480 | Continuous Zoom 4.4 - 132mm HFOV 63.4°- 2.3° |
| AC105Z17V1-PHDC | AC105Z17V4-PHDC | 26-105mm | 23° - 5.9° | Continuous Zoom | | |
| AC150Z17V1-PHDC | AC150Z17V4-PHDC | 25-150mm | 25.3° - 4.1° | Continuous Zoom | | |
| AC135D17V1-PHDC | AC135D17V4-PHDC | 45 / 135mm | 14.3° / 4.6° | Dual Field of View | | |

Accuracii XRU HD

Ultra Long-Range Multi-Sensor Camera System



- Unique Uncooled Thermal Camera**
The Accuracii™ XRU HD is a market leading dual-sensor surveillance system. This unique system features an advanced high resolution uncooled 25-150mm or 25-225mm continuous zoom camera, with an HD mid or long-range visible light camera on a PTZ unit.
- Low Maintenance**
Uncooled thermal cameras require little maintenance, ensuring low cost of ownership.
- Simple Integration**
Pelco-D and ONVIF Profile S compliant, common industry mounting options, and scene awareness software allow for easy integration and ease of use.
- Rugged Design**
Designed and certified to IP66, for hot, cold, dusty and other harsh environments.

| Part Number | Lens Size | Horizontal FOV | Thermal Lens Type | Thermal Core (Pixel Size) Resolution | Visible Light HD Lens Options | Options | Visible Light Lens Options |
|-------------|------------|----------------|-------------------|---|---|---|---|
| AC150Z17V | 25 - 150mm | 25.3° - 4.1° | Continuous Zoom | LWIR Uncooled (17μ) 640 x 480 | 4.3 - 129mm HFOV 63.7° - 2.3° or 10 - 320mm HFOV 35.3° - 1.1° | Analog TCP/IP LRF GPS Image Stabilization | 3.4 - 122mm 36x CCD HFOV 57.8° - 1.7° or 10 - 320mm 32x CCD HFOV 35.3° - 1.1° |
| AC225Z17V | 25 - 225mm | 24.5° - 2.8° | | | | | |

Accuracii XR HD

Ultra Long-Range Multi-Sensor Camera System



- Cooled Thermal Camera System**
The Accuracii™ XR is a cooled thermal camera system that combines high sensitivity and ultra long range performance, providing surveillance beyond 20km.
- Dual Channel/Dual Output Video**
View both thermal and visible light channels at the same time.
- Simple Integration**
Pelco-D compliance, common industry mounting options, and scene awareness software allows for easy integration and ease of use.
- Rugged Design**
Designed and certified to IP66, for hot, cold, dusty and other harsh environments.

| Part Number | Lens Size | Horizontal FOV | Thermal Lens Type | Thermal Core (Pixel Size) Resolution | Visible Light HD Lens | Options |
|-------------|--------------|----------------|-------------------|---|--------------------------------------|---------|
| AC275Z15V | 19 - 275mm | 28.3° - 2.0° | Continuous Zoom | MWIR Cooled (15μ) 640 x 512 | 10 - 320mm HFOV 35.3° - 1.1° | Analog |
| AC300Z15V | 15 - 300mm | 35.1° - 1.8° | | | | TCP/IP |
| AC420Z15V | 21 - 420mm | 25.1° - 1.3° | | | 15.6 - 500mm HFOV 22.4° - 1.8° | LRF |
| AC700Z15V | 48.5 - 700mm | 11.9° - 0.8° | | | | GPS |

Accuracii TO

Thermal Pan & Tilt Camera



- Innovative Features**
Unique image processing and enhanced contrast for video analytics systems.
- Simple Integration**
Pelco-D and ONVIF Profile S compliant.
- Rugged Design**
Designed and certified to IP66, for hot, cold, dusty, and other harsh environments.
- Avanced Optics**
Continuous Zoom, Dual Field of View, Motorized, and Autofocus lens options that offer threat detection beyond 6km.

| Part Number (Serial) | Part Number (IP) | Lens Size | Horizontal FOV | Thermal Lens Type | Thermal Core (Pixel Size) Resolution | Video Types | Communication Protocol | Control Type |
|----------------------|------------------|------------|----------------|-------------------------|---|---|-----------------------------|--|
| AC60A17V-TOP00 | AC60A17V-TOIP00 | 60mm | 10.3° | Athermal | LWIR Uncooled (17μ) 640 x 480 | RS-170 (30Hz) / CCIR (25Hz), 1.0V p-p, 75ohm Analog or IP H.264 or MJPEG Digital | Pelco-D, ONVIF Profile S | Serial: RS422/ RS485 (4-wire) or TCP/IP |
| AC100A17V-TOP00 | AC100A17V-TOIP00 | 100mm | 6.2° | | | | | |
| AC135D17V-TOP01 | AC135D17V-TOIP1 | 45/135mm | 14.3°/4.6° | Dual FOV (Autofocus) | | | | |
| AC100Z17V-TOP01 | AC100Z17V-TOIP1 | 15 - 100mm | 42.2° - 6.2° | Continuous Zoom | | | | |

Sii HB 75

Handheld Thermal Binocular



- **Night Vision Capability**
The Sii™ HB 75 with visible light and thermal night channels is ideal for surveillance, perimeter security, search & rescue, and other applications on land or at sea.
- **Long Range Detection**
Delivering high-resolution nighttime vision capabilities that enable human target detection up to 2.2km and vehicle detection up to 4km.
- **Extra Long Operating Performance**
Sii™ HB 75 provides bright, sharp images day or night, in all security and civil operations, offering up to 9 hours of continuous operation, with field replaceable batteries. Sii™ HB 75 is an unmatched combination of excellent performance and affordability in a portable, lightweight device.

| Imaging Characteristics | |
|------------------------------------|--|
| Resolution | 640 x 480, 17µm / 60Hz |
| Day Sensor | 1/3" HAD CCD II |
| Brightness and Contrast Adjustment | Manual/auto |
| Digital Zoom | x1 - x4 (0.2 increments) |
| Optical Magnification | x3 |
| Field of View | 8.3° x 6.2° |
| Polarity Control | White hot / black hot |
| Image Storage & Video Recording | Up to 200 images / Live AVI video over SD card |

| Electro-Mechanical Characteristics | |
|-------------------------------------|---------------------------------------|
| Operating Temperature | -40° to +50°C (-40° to +122°F) |
| Power Source & Operating Time | Rechargeable batteries, up to 9 hours |
| Startup Time | 5 seconds |
| External Power Input & Video Output | Yes |
| Output Computer Communication | Yes |
| Weight | 1.4kg (3.1lb) without battery |
| Built-in Digital Compass | Yes |
| Waterproof | IP66 |

Sii WS 60

Thermal Weapon Scope



- **Rugged, Mobile and Compact**
Sii™ WS 60 is designed to be taken anywhere and can survive rugged field conditions.
- **Excellent Image Quality**
Sharp contrast thermal imager delivers high accuracy and effectiveness in all weather conditions.
- **Long Range Detection**
Sii™ WS 60 provides enhanced night vision capabilities, enabling human target detection up to 1.5km and vehicle detection up to 3.5km.
- **Ease of Use**
Can be easily adjusted and boresighted to any type of weapon Up to 0.5in caliber weapons.

| Imaging Characteristics | |
|--|---|
| Resolution | 640x480, 17µm / 60Hz |
| Brightness & Contrast Adjustment & Focus | Yes |
| Digital Zoom | x1 - x4 (0.2 increments) |
| Lens and Optical Magnification | F.L 60mm x3 |
| Reticle | Adjusted to customer weapon and ammunition. Up to 5 reticles auto-matically adjusted to digital zoom. |
| Polarity Control | Manual (white hot / black hot) |
| Image Storage | Up to 200 images |

| Electro-Mechanical Characteristics | |
|-------------------------------------|--|
| Operating Temperature | -40°C to +50°C (-40°F to +122°F) |
| Power Source & Operating Time | 18650 Rechargeable batteries, up to 10 hours |
| External Power Input & Video Output | Yes |
| Output Computer Communication | Yes (via USB port) |
| Weight | Weight 950g |
| Interface | Standard rail grabber |
| Water/Dust-proof | IP67 |

Sii HB 100

Handheld Thermal Binocular



- **Night Vision Capability**
The Sii™ HB 100 extra long-range thermal binocular with visible light and thermal night channels provides 24/7 enhanced vision for surveillance, perimeter security, search & rescue, and other applications on land or at sea.
- **Extra Long-Range Detection**
Sii™ HB 100 delivers high-resolution performance day or night, enabling human target detection up to 2.8km and vehicle detection up to 6.7km.
- **Excellent Performance**
Sii™ HB 100 produces brighter and sharper images in all weather conditions making it ideal for all security applications. Portable and lightweight, it offers up to 9 hours of continuous operation with field replaceable batteries. Sii™ HB 100 offers cooled capabilities delivering high accuracy in all weather conditions at the price of an uncooled unit.

| Imaging Characteristics | |
|------------------------------------|--|
| Resolution | 640 x 480, 17µm / 60Hz |
| Day Sensor | 1/3" HAD CCD II |
| Brightness and Contrast Adjustment | Manual/auto |
| Digital Zoom | x1 - x4 (0.2 increments) |
| Optical Magnification | x4 |
| Field of View | 6.2° x 4.7° |
| Polarity Control | White hot / black hot |
| Image Storage & Video Recording | Up to 200 images / Live AVI video over SD card |

| Electro-Mechanical Characteristics | |
|-------------------------------------|---------------------------------------|
| Operating Temperature | -40° to +50°C (-40° to +122°F) |
| Power Source & Operating Time | Rechargeable batteries, up to 9 hours |
| Startup Time | 5 seconds |
| External Power Input & Video Output | Yes |
| Output Computer Communication | Yes |
| Weight | 1.6kg (3.1lb) without battery |
| Built-in Capabilities | LRF, GPS, and Digital Compass |
| Waterproof | IP66 |

Sii WS 75

Thermal Weapon Scope



- **Rugged, Mobile and Compact**
Sii™ WS 75 field proven design allows it to survive harsh field conditions making it ideal for all military operations.
- **Superb Image Quality**
High sensitivity thermal detector tailored for better detection of threats in total darkness, bad weather or when the target is camouflaged.
- **Long Range Detection**
Sii™ WS 75 delivers high-resolution nighttime vision capabilities, enabling human target detection up to 2km and vehicle detection up to 4km.
- **Can be Quickly Adjusted & Boresighted**
Up to 0.5in caliber weapons.

| Imaging Characteristics | |
|--|--|
| Resolution | 640x480, 17µm / 60Hz |
| Brightness & Contrast Adjustment & Focus | Manual / Auto |
| Reticle | Adjusted to customer weapon and ammunition. Up to 5 reticles automatically adjusted to digital zoom. |
| Digital Zoom | x1 - x4 (0.2 increments) |
| Lens and Optical Magnification | F.L 75mm x4 |
| Polarity Control | Manual (white hot / black hot) |
| Image Storage | Up to 200 images |

| Electro-Mechanical Characteristics | |
|-------------------------------------|--|
| Operating Temperature | -40°C to +50°C (-40°F to +122°F) |
| Power Source & Operating Time | 18650 Rechargeable batteries, up to 10 hours |
| External Power Input & Video Output | Yes |
| Output Computer Communication | Yes (via USB port) |
| Weight | Weight 1.0kg |
| Interface | Standard rail grabber |
| Water/Dust-proof | IP67 |

Fire Detection



Enhance the safety of infrastructure, equipment and personnel with Opgal's embedded solutions, which transform Sii™ and Accuracii™ cameras into versatile fire and heat detection systems. Cameras with Fire Risk and Detection algorithms are able to detect and identify a nearly unlimited number of fires and heat sources, while avoiding false alarms from hotspots at the scene. They are accurate at detecting increases in heat as well as large fires as far as 6km away in the longest range configuration.

Longe Range Fire Detection

Examines a scene for “hotspots” and determines which pixels meet the pre-defined criteria for the accurate detection of fire.

Heat Detection

Detects heat above a user-defined threshold, so that potential fires and other heat related risks can be prevented. Fire risk and detection capabilities are available in the Sii™ AT, Sii™ ML and Accuracii™ ML camera systems.

Sitebuilder



Camera Site Design Tool

Sitebuilder is the easiest, most user-friendly tool available for designing a site security system. SiteBuilder allows you to use the incredibly accurate and always available Google Maps™ database to place cameras to match your specific security site needs.

- Find your specific site in Google Maps™
- Show and fill in coverage gaps
- Simulate site-specific needs
- See Security or Fire Detection coverage
- Save unlimited sites and site variations
- Change sensor, mounting height, FOV, etc.

Video Analytics



Event-Based Solutions for Your Security Infrastructure

Video analysis adds intelligence to our security solutions by sending alerts when it detects motion. It also reduces central system storage, network bandwidth and total cost of ownership (TCO) of the video surveillance solution.

Our video motion detection (VMD) intelligence detects moving objects such as people, vehicles and even animals (depends on configuration). The motion detection trigger can be set within the entire frame or within a predefined area. The intelligent video analytics can be programmed to ignore non-threat, moving objects thus reducing false alarms by analyzing and learning the scene.

Complementary Security Solutions



The rise of global HLS threats and the influence of technological advancements have shifted the market demand for security surveillance solutions. In today's world, it's important to provide an integral approach to all security related scenarios. The combination of different technologies as an integrated security solution ensures reliable detection and identification of threats. By implementing the multi-layered approach we are able to create a complete security solution that is not only reliable, but in the long-run also cost effective. We partner with various technology providers to deliver a comprehensive surveillance solution, that combines different technologies to answer all needs.

Radar



Detection of Moving Targets

Improve the perimeter security of any site with an added detection layer. Radar technology uses high-frequency radio waves to track the presence of an object and determine the distance and location. When combined with thermal imaging systems, radars act as target detectors cueing the cameras to focus and zoom in on the target for proper assessment and identification.

Ground Sensor



Threat Detection at Sensor Level

Ground sensors have the ability to monitor and secure any perimeter in an unattended manner. These sensitive detectors can perceive very small vibrations in their vicinity providing an added protection layer to any security system. Designed to be buried underground, they are invisible to intruders and allow greater identification of threats of all types.

VMS



When having multiple security layers working side by side, it is important to have a reliable sophisticated software that can seamlessly integrate all the technologies. We have pre-integrated and partnered with a number of market-leading VMS platforms to deliver the right software for any security application. Depending on the scope of the project we can recommend the right platform to support our cameras and any other complementary devices that our clients might need to integrate.

