

SUPERIOR THERMAL SECURITY CAMERAS



The Sii family is a line of thermal security cameras used for observing and monitoring sensitive sites in total darkness, light fog, smoke, or day light conditions.

Sii cameras have the widest variety of lens options on the market and can be configured with IP video and control, with Vumii's innovative Fire Detection Algorithm, or integrated with a pan/tilt unit.

KEY BENEFITS

Innovative Features – Unique signal processing algorithms provide enhanced contrast for Video Analytics and Vumii's innovative Fire Detection Algorithm

High Image Quality – High Resolution, small pixel pitch

Advanced Optics – Continuous Zoom, Dual Field of View, F#1.0 Motorized Lenses, and Thermal Imaging Autofocus

Versatility – Wide variety of fixed, PTZ, and optics configurations

Easy Installation – Pelco D protocol, common industry mounting options, serial or IP communication

Outdoor Design – Outdoor designed to withstand the harshest environmental conditions, rated IP66.



APPLICATIONS

- Safe City
- Public Safety
- Solar Farms
- Fish Farms
- Waste Management
- Fire Detection
- Airports Safety and Security
- Railway Infrastructure
- Electric & Nuclear Power Station
- Water Utility Infrastructure
- Petrochemical
- Residential

AVAILABLE CONFIGURATIONS

Sii is available as a NTSC or PAL camera with a wide variety of thermal engine, lens and other options:

Advanced Motorized Lenses with Autofocus

- Continuous Zoom -15-100mm
- Dual FOV - 45/135mm
- Fixed FOV (F#1.0) - 25mm, 50mm, 75mm, 150mm

Single FOV Athermalized Lenses

- Fixed FOV - 8.5mm, 14mm, 19mm, 35mm, 50mm, 60mm, 100mm

Resolution

- 17μ 640 x 480 (NTSC/PAL)
- 25μ 320 x 240 NTSC
- 25μ 384 x 288 PAL

Fixed or Pan/Tilt Mounted

Analog or IP

Sii Configurations

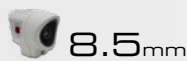
Engine & Lens Configurations



Imaging Characteristics		
Effective Pixels	17µ: 640 x 480 (NTSC / PAL)	25µ: 320 x 240 (NTSC) 25µ: 384 x 288 (PAL)
Imager Type	Uncooled Microbolometer 7.5-14µ	
NETD	< 50° mK	< 40° mK
Video Output	RS-170 (30Hz) / CCIR (25Hz), 1.0V p-p, 75ohm	
Lens Options (HFOV): Motorized Zoom & AutoFocus	<u>NTSC / PAL</u> Dual FOV: 45/135mm (14.3°/4.6°) Continuous Zoom: 15-100mm (42.2°-6.2°) Fixed F#1.0: 25mm(25°) 50mm(12.4°) 75mm(8.3°) 135mm(4.6°) 150mm(4.2°)	<u>NTSC</u> Dual FOV: 45/135mm (10.4°/3.4°) Continuous Zoom: 15-100mm (30.8°-4.6°) Fixed F#1.0: 25mm(18.4°) 50mm(9.2°) 75mm(6.1°) 135mm(3.4°) 150mm(3.1°) 210mm(2.2°) <u>PAL</u> Dual FOV: 45/135mm (12.6°/4.1°) Continuous Zoom: 15-100mm (37.1°-5.5°) Fixed F#1.0: 25mm(18.4°) 50mm(9.2°) 75mm(6.1°) 135mm(3.4°) 150mm(3.7°)
Lens Options: Athermalized (Focus Free)	<u>NTSC / PAL</u> 8.5mm(73°) 14mm(44°) 19mm(33°) 35mm(18°) 50mm(12.4°) 60mm(10.3°) 100mm(6.2°)	<u>NTSC</u> 8.5mm(54°) 14mm(33°) 19mm(24°) 35mm(13°) 50mm(9.2°) 60mm(7.6°) 100mm(4.6°) <u>PAL</u> 8.5mm(54°) 14mm(33°) 19mm(24°) 35mm(13°) 50mm(9.2°) 60mm(7.6°) 100mm(4.6°)

In Camera Analytics	
Thermal Autofocus	Autofocus on Demand is available in Motorized and Zoom lens configurations
Fire Detection*	Flame Detection Alerts
Risk of Fire (Heat) Detection*	High Risk of Fire Alert (Temp. Threshold)
Alarm Types*	Video Overlay, Serial Communication, and Dry Contact Closure Outputs, IP communication (optional)

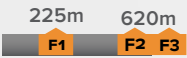
Fire Detection Performance



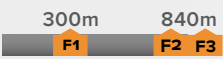
8.5mm



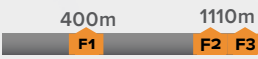
14mm



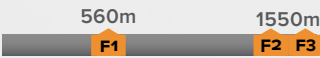
19mm



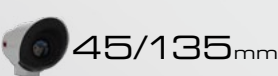
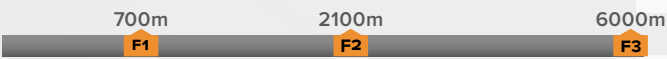
25mm



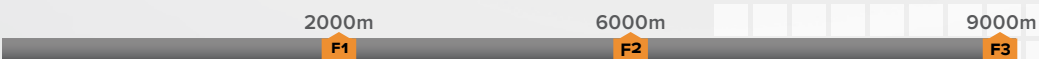
35mm



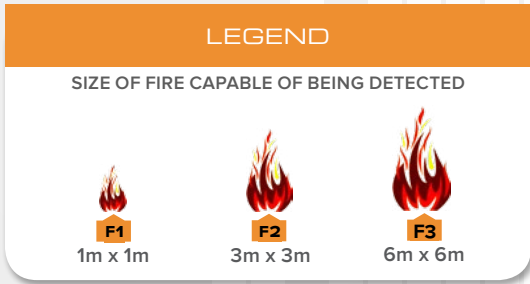
60mm



45/135mm



*Flame & Fire Risk Detection available on select 17µ Sii models



*Performance Dependent on Atmospheric Conditions

Fixed Configurations



Sii products come in one of several camera enclosure configurations, dependent upon lens type

Electro-Mechanical Characteristics	Sii AT	Sii ML	Sii MLX
Unit Dimensions	7.95" (L) x 5.32" (W) x 6.65" (H) 202mm (L) x 135mm (W) x 169mm (H)	12.91" (L) x 8.07" (W) x 9.53" (H) 328mm (L) x 205mm (W) x 242mm (H)	15.47" (L) x 8.03" (W) x 8.15" (H) 393mm (L) x 204mm (W) x 207mm (H)
Unit Weight	< 6.94 lbs (3.15kg) - Dependent on Optics		< 11.8lbs (5.35kg) - Dependent on Optics
Environmental Rating	IP66; 93% RH Humidity		IP65; 93% RH Humidity
Certifications	CE, FCC, RoHS, EN60950-1, IEC 60721-4-4, EN60950-22, IEC 60068, IEC 60529		CE, FCC
Power Input	12-32VDC (PoE available with TCP/IP version using Athermalized Lenses)		9-28VDC
Power Consumption (Continuous/Max)	w/ Athermalized Lenses: (0.3A/0.3A) w/ Motorized Lenses: (0.3A/0.9A) w/ Continuous Zoom/DFOV Lenses: (0.3A/2A)		0.3A / 0.9A
Operating Temperature	-40° to +140° F (-40° to +60° C)		-27° to +131° F (-33° to +55° C)
Communication Protocol	Pelco-D, Vumii, SDK available		
TCP/IP Option	Analog & IP Video/Control (H.264, MJPEG Encoding)		Not Available
Control Features	Autofocus (motorized models), Continuous Zoom, Digital Zoom		
Available Mounts	Wall Mount Pole Mount Adaptor		Contact Vumii for mounting information

PTZ Configurations

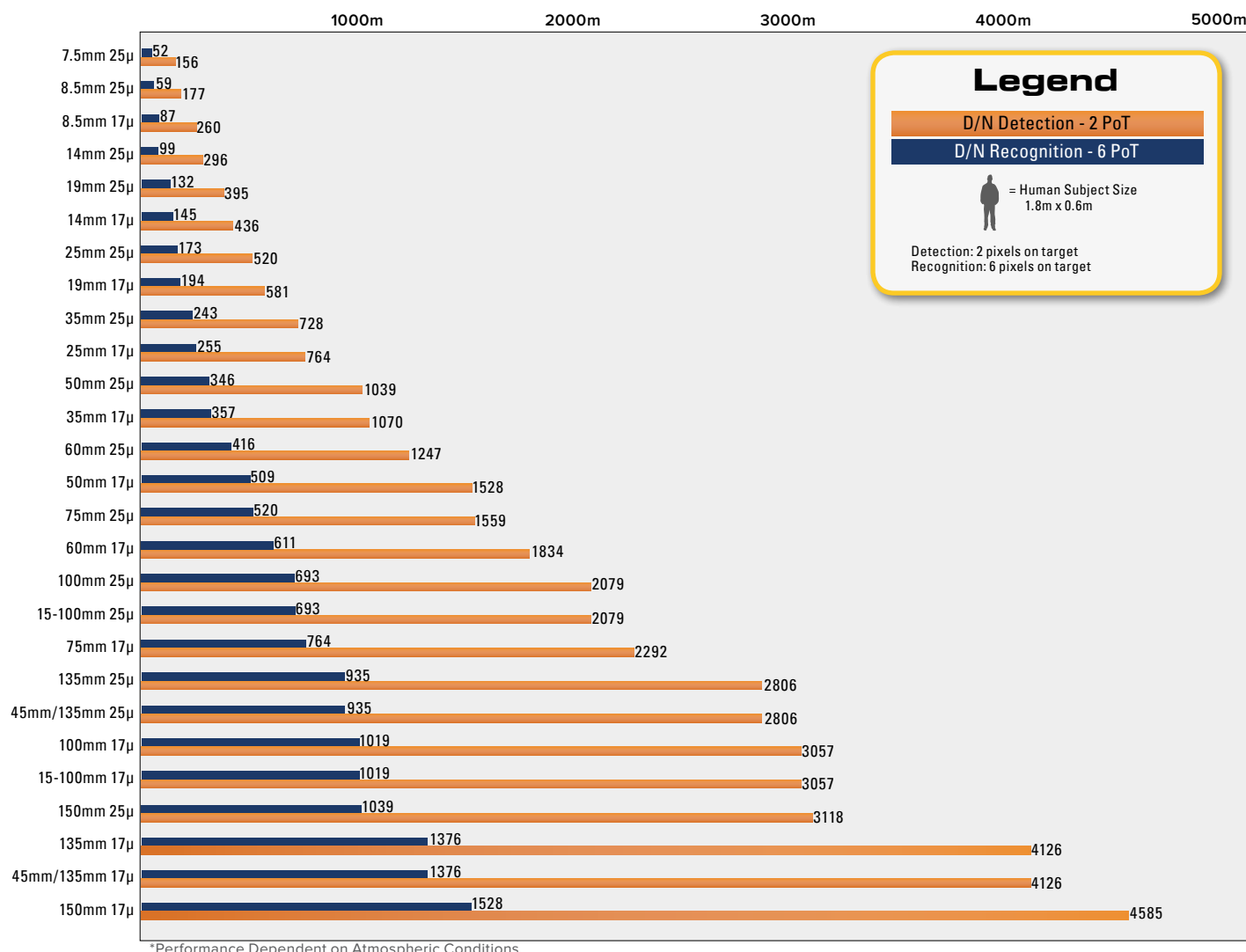


Sii cameras are also available with an integrated pan/tilt unit

Pan/Tilt Unit Characteristics	Sii AT	Sii ML	Sii MLX
Unit Dimensions	7.95" (L) x 14.92" (W) x 18.62" (H) 202mm (L) x 379mm (W) x 473mm (H)	12.91" (L) x 16.34" (W) x 18.62" (H) 328mm (L) x 415mm (W) x 473mm (H)	Contact Vumii for information about customized PTZ options
Unit Weight	< 33.7 lbs (15.3kg) - Dependent on Optics		< 40lbs (18kg) - Dependent on Optics
Environmental Rating	IP66; 93% RH Humidity		
Operating Temperature	-27° to +131° F (-33° to +55° C)		
Power Input(Consumption)	24VDC (1.0A Continuous, 5A Max)		
Communication Protocol	Pelco-D, Vumii, SDK available		
Control Connection	Serial: RS422/485, TCP/IP (optional)		
Pan Range / Tilt Range	360° Continuous / -90° to +90°		
Pan Speed	Variable Speed, 0 - 100°/sec Max		
Available Mounts	Wall Mount Pole Mount Adaptor		Contact Vumii for mounting information

* Some countries may be subject to thermal camera export licensing requirements

Range Performance



Horizontal Field of View

Lens	17μ NTSC / PAL	25μ NTSC	25μ PAL
8.5mm	73.3°	53.9°	64.7°
14mm	44.5°	32.7°	39.3°
19mm	33.2°	24.4°	29.3°
25mm	25.0°	18.3°	22.0°
35mm	17.8°	13.1°	15.7°
50mm	12.5°	9.2°	11.0°
60mm	10.4°	7.6°	9.2°
75mm	8.3°	6.1°	7.3°
100mm	6.2°	4.6°	5.5°
15-100mm	42.2° - 6.2°	30.8° - 4.6°	37.1° - 5.5°
45/135mm	14.3° / 4.6°	10.4° / 3.4°	12.6° / 4.1°
150mm	4.2°	3.1°	3.7°



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