

www.encinoenviron.com

support@encinoenviron.com

+1(281)-201-3544



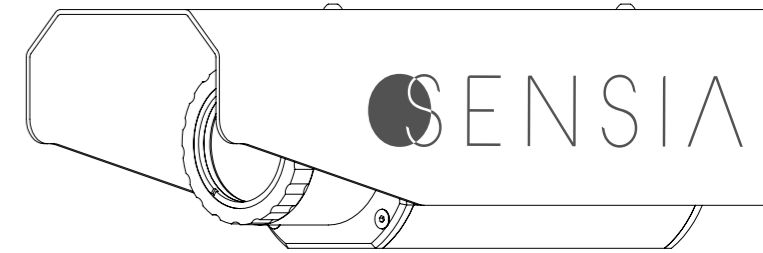
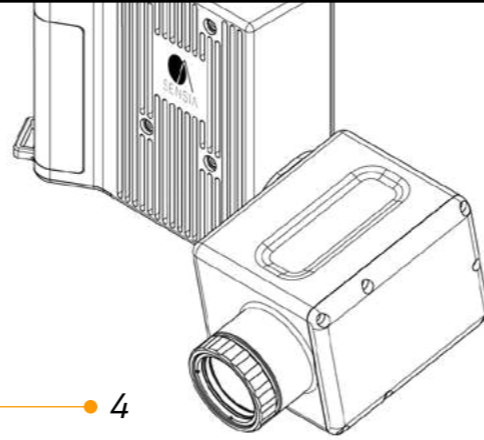
Product Catalog 2024





SENSIA

AI-Powered Infrared Imaging



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SENSIA

Our Certifications



ISO 14001:2015

SENSIA is certified under the 14001 standard for the "design, development and manufacturing of infrared-based environmental management."



ISO 9001:2015

SENSIA is certified under the 9001 standard for the "design, development and manufacturing of infrared-based environmental management."



IEC 80601

International Electromechanical Commission standard for infrared screening thermographs.



ATEX 60079

ATEX Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/UE.

About SENSIA

SENSIA, founded in 2008 in Madrid, Spain, is a leading developer and manufacturer of groundbreaking AI-powered infrared (IR) imaging technology in handheld and continuous monitoring formats for various applications across the energy, security, and industrial sectors. Our mission is to expand the adoption of IR imaging by delivering valuable hardware, software and analytics which positively impact the environment, industry, and society.

Trust, reliability, multifunctionality and cost-effectiveness are the foundations of our commitment to our customers. Adopting SENSIA's technology implies a promise of quality, customer service and success. SENSIA owns the intellectual property of our IR cameras, software, and analytics.



REDLOOK Technology

SENSIA's RedLook is the only AI-powered infrared imaging technology in the world used to autonomously perform the following functionalities:



Gas Detection
High VOC and hydrocarbon detection probability with no false alarms



Gas Quantification
Accurately quantify emissions in mass and volume flow rate units



Flame Detection
Reliable and accurate early warning system for fire



Surveillance
Next-generation security for forbidden areas, people and vehicle tracking and more



Flare Monitoring
Real-time flare and pilot flame supervision to avoid liquid carryover, pilot flame outages, and more



Flare Efficiency
Instantaneous destruction and removal efficiency retrieval and tracking



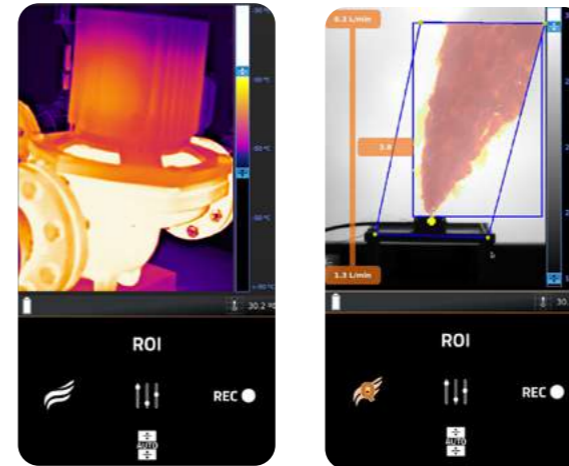
Intelligent Thermography
Automatic temperature monitoring based on highly accurate thermography



Furnaces Inspection
Advanced high temperature measurements through flames

RedLook Lite for Quantitative OGI

See page 16 for more information.



RedLook for Continuous Monitoring

See page 28 for more information.



- ✓ AI-powered
- ✓ Autonomous
- ✓ Multifunctional



Where We Operate

Through RedLook's customizable nature and SENSIA's organizational flexibility due to in-house development and manufacturing, we can respond to needs across multiple industries around the world in a valuable, impactful way.

- **Environment:**

Comply with regulation, report emissions, perform leak detection and repair (LDAR), and more.

See page 11.

- **Energy:**

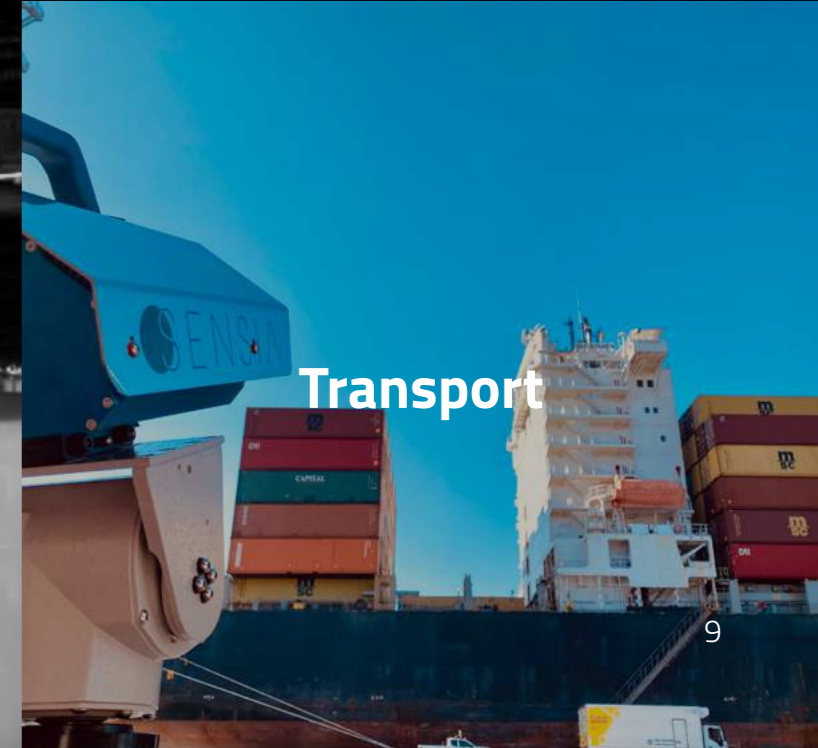
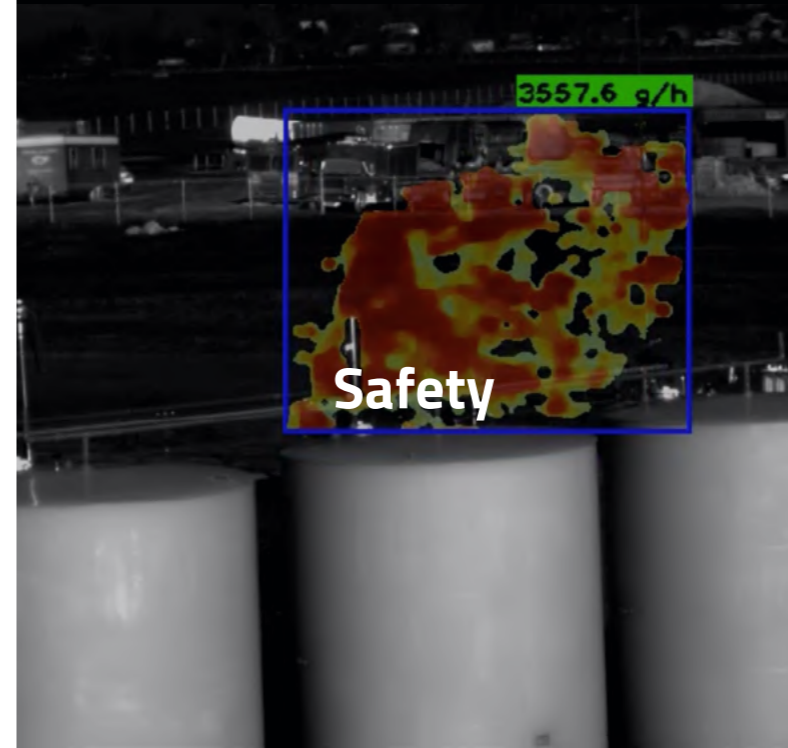
Monitor for refrigerant and toxic gas leaks and use thermography for preventive maintenance of components from production to distribution. See page 13.

- **Safety:**

Detect toxic and flammable gas leaks, conduct surveillance on plant premises, foresee component failure and prevent other workplace disasters. See page 15.

- **Transport:**

Contact us for more details.





REDLOOK for Environment

With a wide variety of hydrocarbons like methane and other greenhouse gases being visible in the infrared spectrum, SENSIA's cameras can not only detect but also quantify the flow rate of the gas to calculate emissions. This result can help companies meet OGMP 2.0 Level 4 and 5 requirements while also meeting the newest EU and EPA methane emission regulations.

- For OGI cameras for LDAR, see pages 20 - 25
- For continuous emissions monitoring, see pages 28 - 45.



Sample analytics measurements:

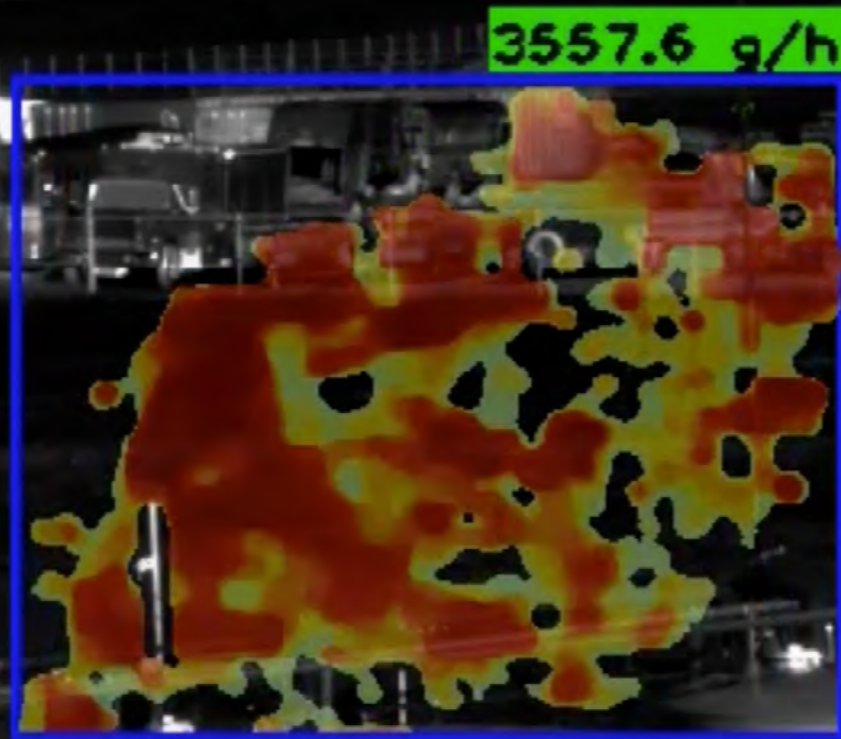
- Achieve OGMP 2.0 Gold Standard
- Complete emissions inventories with a high level of granularity
 - Aggregated component emissions
 - Aggregated site emissions



REDLOOK for Energy

As the energy sector is very diverse in terms of energy sources, processing and distribution, so is SENSIA's solution offering. From reliable and accurate refrigerant and toxic gas leak detection to component temperature monitoring for preventative maintenance, SENSIA has a corresponding, applicable technology.

- For portable gas leak detection, see pages 20 - 25.
- For continuous monitoring for gas leaks, see pages 34 - 39.
- For component temperature monitoring for preventive maintenance, see pages 34 - 49.



REDLOOK for Safety

Disasters like gas leaks, fires, component failures, etc. can result in property damage, prolonged downtime, injuries, fatalities, and other consequences. Our HSE solutions span from speedy gas leak and flame detection to forbidden area surveillance and intelligent thermography for preventive maintenance and furnace monitoring through flames.

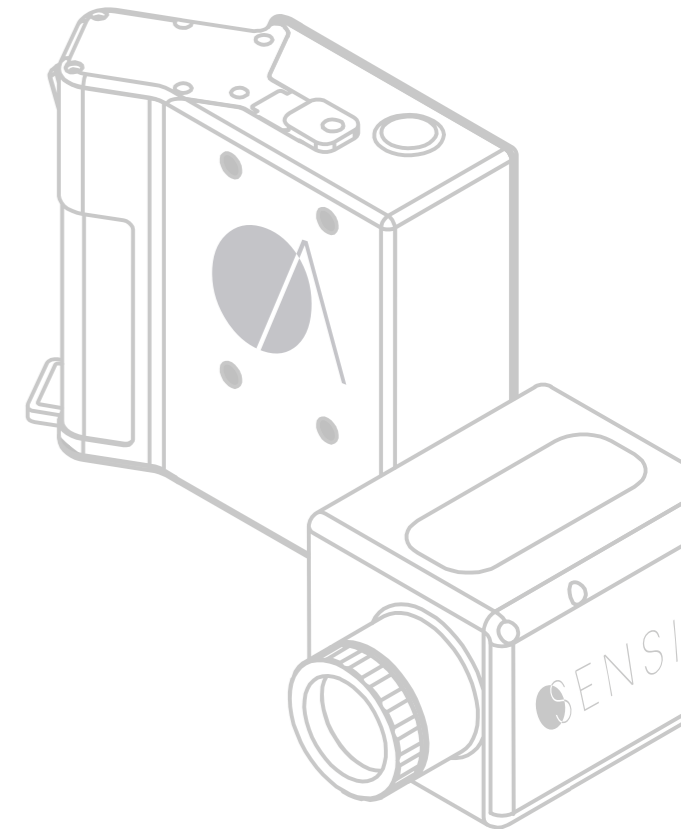
- For portable gas leak detection, see pages 20 - 25.
- For continuous monitoring for gas leaks, see pages 34 - 39.
- For flame detection, see pages 36 - 39, 46 -47.
- For surveillance, see pages 34 - 39, 46 - 49.
- For thermography for preventive maintenance, see pages 34 - 49.
- For furnace monitoring, see pages 42 - 43.



Handheld Cameras

Ergonomic, AI-Powered Handheld Infrared Cameras for Gas Detection and Quantification and More

SENSIA's reliable handheld infrared cameras operate with our top-of-the-line RedLook software adapted to portable gas detection and built-in quantification. RedLook for Handheld implements trained artificial intelligence algorithms for instantaneous gas detection and quantification combined with the most advanced signal integration technology and reporting interface. Our Mileva and Caroline optical gas imaging (OGI) cameras perform sophisticated analytics such as quantification of gas volume flow rates for OGMP 2.0 Level 4 requirements for assets or mandatory leak detection and repair (LDAR) surveys. Our CalcifIR camera offers furnace inspection capabilities and can measure component temperatures through flames.



REDLOOK Handheld Cameras

The Ultimate AI-Powered, Quantative OGI Suite

Our RedLook Handheld suite includes next-generation features and connectivity, from speedy, AI-powered gas detection and accurate gas volume flow rate quantification to streamlined report generation and more. With our Mileva and Caroline series cameras oriented to LDAR campaigns and OGMP 2.0 Level 4 reporting and CalcifIR camera for furnace inspections, you can survey broad areas of equipment in less time, scan areas where traditional contact measurement tools cannot access, and avoid potentially harmful contact with toxic gases or harsh environments with our handheld cameras.



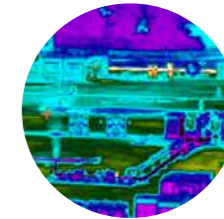
Optimized User Experience

Comfortable and Safe Handling



All our handheld cameras come with a durable, hardshell rolling case to make surveys as convenient as possible while securely storing the camera and all accessories.

Intuitive Interface



5 unique color palettes
Different color palettes available providing the temperature in Celsius.



Saturated pixel coloring
Any pixel outside of the calibrated temperature range is highlighted and a warning indicator is triggered.



Temperature indicator
Shows the precise temperature value of elements shown in the center of the screen.



Auto-contrast mode
Multiple automatic modes for enhancement of the thermal image to get the optimum temperature values for each scenario.

Mileva 33

Quantitative OGI for Leak Detection and Repair

SENSIA's Mileva 33 is the latest model of Quantitative Optical Gas Imaging (QOGI) for the detection of fugitive emissions of methane and other hydrocarbon gases with the highest infrared resolution on the market.



Leak Rate Quantification

EPA 0000a Compliant

High Resolution and Bright Touchscreen

ATEX Certification

Visible and IR Camera

GPS & Wireless Connectivity

Rugged & Ergonomic Design

Effortless Reporting

Our Technology

Mileva 33 was the first quantitative OGI on the market and it was developed based on years of experience in advanced IR imaging technology and field work. Our OGI combines valuable features and an extremely user-friendly interface. The result: an essential OGI for those who require best-in-class performance, ease of use in the field and digital data management for effortless reporting.

Gases detected	
1,3-Butadiene	Hexane
Acetic Acid	MEK
Benzene	Methanal
Butane	Methane
Ethane	Methanol
Ethanol	Octane
Ethyl Hexyl Acrylate	Pentane
Ethylbenzene	Phenol
Ethylene	Propane
Ethylene Glycol	Propylene
Ethylene Oxide	Toluene
Heptane	Turpentine

Specifications	
FPA	Cooled 640 x 512 px
Pixel Pitch	15 µm
NETD	<15mK @ +50°C
Spectral Region	3,2 to 3,4 µm
Lenses	35 mm
Visible Light Camera Resolution	1920 x 1200 (2.3MP)
Temperature Meas. Accuracy	± 1°C (from 0°C to 250°C Scene Temp.)
Memory Storage	SD card up to 256 GB
GPS Accuracy	<1m
Battery Life	3hr (3 batteries included)
Display	TFT LCD panel 5" HD
Weight	2,4 kg
Size	260 x 150 x 80 mm
Operating Temp. Range	-20°C to +50°C
Storage Temp. Range	-40°C to +71°C
Minimum Detectable Leak Rate (CH ₄)	0,4 g/h
Certifications	EMC (EN 61326:2013) IP65 (EN 60529:2018) ATEX Zone II (EN 60079:2013) EPA 0000a Compliant
Wifi connectivity	Yes

Mileva 45&47



Cooled Quantitative OGI for CO₂ and CO

Mileva 45 and 47 are SENSIA's models of Quantitative Optical Gas Imaging (QOGI) for microleak detection of carbon dioxide (CO₂) and carbon monoxide (CO). They integrate a spectrally optimized high-resolution detector that will catch even the smallest leaks, especially when paired with our built-in AI-powered software.

Leak Rate Quantification

High Resolution and Bright Touchscreen

ATEX Certification

Wireless Connectivity

Rugged & Ergonomic Design

Effortless Reporting

Our Technology

Both Mileva 45 and 47 have an ergonomic design, a bright, adjustable touch screen and are powered by RedLook, the most powerful and intuitive software for gas visualization and reporting. The result: essential OGI for best-in-class performance, ease of use in the field and digital data management for effortless reporting.

Specifications		
Models	Mileva 45	Mileva 47
FPA	Cooled 640 x 512 px	
Pixel Pitch	15 µm	
NETD	< 15mK @ +50°C	
Spectral Region	4,2 to 4,4 µm	4,2 to 4,7 µm
Lenses	35 mm	
Temperature Meas. Accuracy	± 1°C (from 0°C to 250°C Scene Temp.)	
Memory Storage	SD card up to 256 GB	
Battery Life	3hr (3 batteries included)	
Display	TFT LCD panel 5" HD	
Weight	3,4 kg	
Size	220x 150 x 170 mm	
Operating Temp. Range	-20°C to +50°C	
Storage Temp. Range	-40°C to +71°C	
Certifications	EMC (EN 61326:2013) IP65 (EN 60529:2018) ATEX Zone II (EN 60079:2013)	
Wifi Connectivity	Yes	

Gases detected		
Models	Mileva 45	Mileva 47
Carbon Dioxide	●	
Phosphine	●	
H ₃ P	●	
CO ₂	●	●
Carbon Dioxide		●
Nitrous Oxide		●
N ₂ O		●

Caroline Series

Uncooled Quantitative OGI for Leak Detection and Repair

SENSIA's Caroline Series of uncooled Quantitative Optical Gas Imaging (QOGI) can detect fugitive emissions of methane, SO₂, SF₆, methanol, refrigerants, ammonia, and other gases. Our Caroline models provide a cost-effective solution for a fraction of the cost of cooled OGI while still meeting new regulatory minimum detection requirements and providing the best uncooled resolution.



Leak Rate Quantification

EPA 0000a Compliant

High Resolution Touchscreen

ATEX Certification

Wireless Connectivity

Rugged & Ergonomic Design

Effortless Reporting

Our Technology

All Caroline Series models have best-in-class infrared detector resolution, a new, sleek design, a bright 5-inch touch screen, and are powered by RedLook, the most powerful and intuitive software for gas visualization and reporting. SENSIA's RedLook Handheld control and analysis software unlocks the full potential of Caroline Series Optical Gas Imaging at a lower price point than cooled technology.

Specifications			
Models	Caroline X	Caroline Y	Caroline XY
FPA	Uncooled 640 x 480 px		
Pixel Pitch	17 μm		
NETD	<22mK @ +30°C		
Spectral Region	8 to 14μm	7 to 9.5μm	7 to 14μm
Lenses	20 mm 35 mm		
Temperature Meas. Accuracy	± 1°C (from 0°C to 60°C Scene Temp.)		
Memory Storage	SD card up to 256 GB		
Battery Life	3hr (3 batteries included)		
Display	TFT LCD panel 5" HD		
Weight	2,1 kg		
Size	187 x 165 x 68 mm		
Operating Temp. Range	-20°C to +50°C		
Storage Temp. Range	-40°C to +71°C		
Certifications	EMC (EN 61326:2013) IP65 (EN 60529:2018) ATEX Zone II (EN 60079:2013) II 3G Ex ec IIC T4 Gc		

Gases Detected			
Models	Caroline X	Caroline Y	Caroline XY
1,3-Butadiene	●		●
Acrolein	●	●	●
Acrylic Acid	●	●	●
Ammonia	●		●
Ethanol	●		●
Ethyl Hexyl Acrylate	●	●	●
Ethylene	●		●
Ethylene Glycol	●		●
Ethylene Oxide	●		●
Isoprene	●		●
Methanol	●		●
Nitrogen trifluoride	●		●
Phenol	●	●	●
R11,R12,R13,R123	●	●	●
R125	●		●
R134A	●	●	●
R13B1	●		●
R417A		●	●
R422A	●		●
Sulfur Dioxide		●	●
Sulfur Hexafluoride	●		●
Vinyl Chloride		●	●
Acetic Acid		●	●
Nitrous Oxide		●	●
Methane		●	●
R508A		●	●
Propylene		●	●

CalcifIR **RX**

High-Temp Intelligent Thermography for Furnaces

Calcifir RX technology is based on a handheld infrared camera prepared to accurately measure temperatures through flames. This is the ideal camera for monitoring all kinds of heaters, furnaces, boilers, and many other industrial components with high operating temperatures to perform preventive maintenance.



Intelligent Thermography



High Resolution and Bright Touchscreen



ATEX Certification



Wireless Connectivity



Rugged & Ergonomic Design

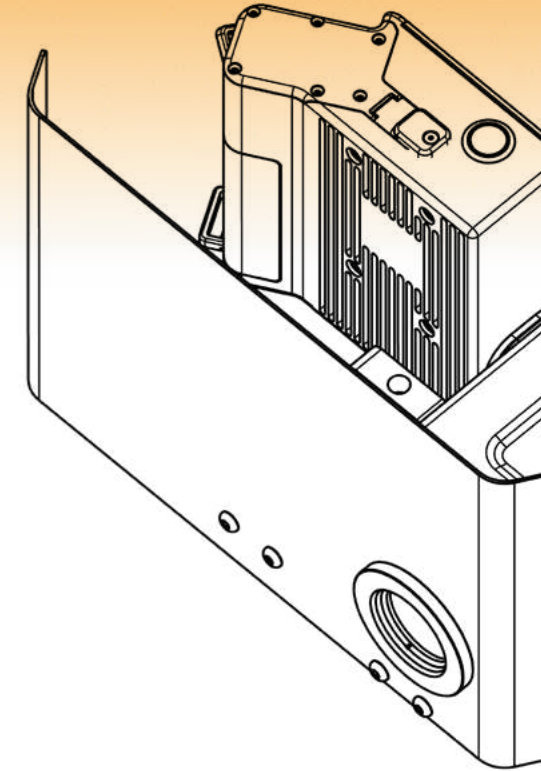


Effortless Reporting

Our Technology

With Redlook Handheld integrated, Calcifir RX becomes a key tool for enhancing operational performance and ensuring a component's structural integrity.

Specifications	
FPA	512 x 640 px
Pixel Pitch	15 μm
NETD	<15mK @ +50°C
Lenses	35 mm
Temperature Meas. Accuracy	± 1oC or 1% WIG (from 50°C to 500°C) ± 2oC or 2% WIG (from 500°C to 1500°C)
Memory Storage	SD card up to 256 GB
Battery Life	3hr (3 batteries included)
Display	TFT LCD panel 5" HD
Weight	3,4 kg
Size	220x 150 x 170 mm
Operating Temp. Range	-20°C to +50°C
Storage Temp. Range	-40°C to +71°C
Certifications	EMC (EN 61326:2013) IP65 (EN 60529:2018) ATEX Zone II (EN 60079:2013)





Continuous **Monitoring**

AI-Powered Autonomous Continuous Monitoring with Fixed Infrared Systems

SENSIA's wide range of fixed cameras for continuous monitoring covers a variety of HSE demands, from spotting gas leaks to providing surveillance and more. Every SENSIA system has been successfully deployed across the oil and gas, energy, security, and industrial sectors with the appropriate RedLook functionalities. RedLook is SENSIA's AI-powered continuous monitoring solution, the industry-leading combination of powerful software, top-of-the-line hardware, and comprehensive analytics. Completely autonomous, this advanced monitoring system presents a series of innovative capabilities bundled into a single control software that is 100% unattended. RedLook enables exhaustive monitoring with automated tours with customizable settings to scan large areas of installations and real-time alerting via seamless third-party system and industrial protocol integration. Highly versatile, the easy-to-use interface allows users to configure several Regions of Interest (ROIs) within the area to be monitored and individually assign a functionality, providing a complete HSE solution.

The REDLOOK Advantage:






AI-Powered Reliability

- ✓ Higher probability of detection
- ✓ Lower minimum target size
- ✓ Longerrange detection
- ✓ No false alarms



Shaping The Future Of **Infrared Imaging**

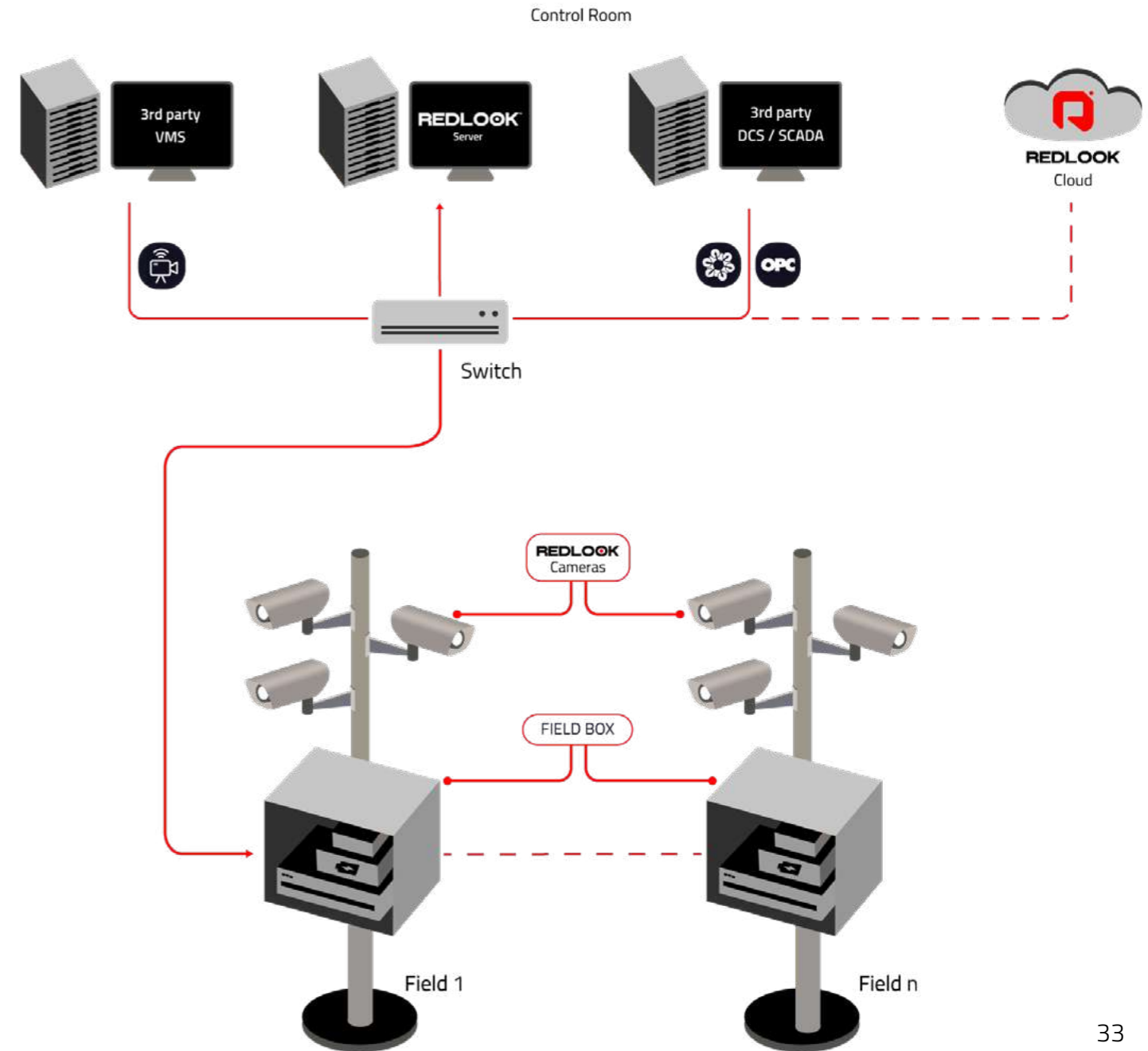
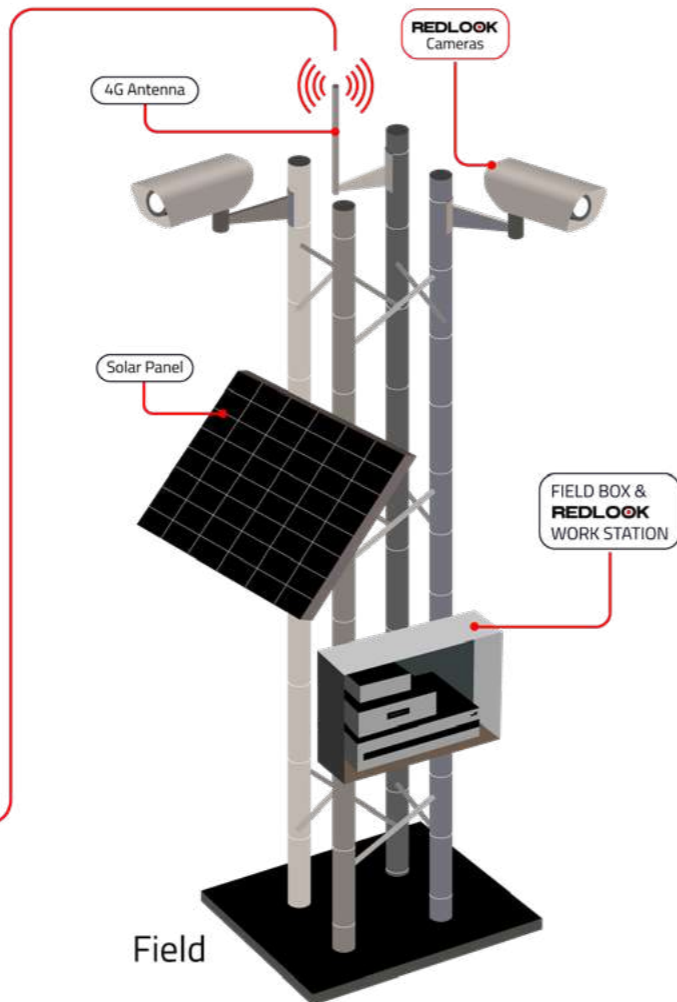
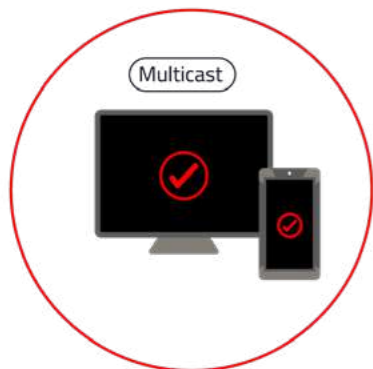
Other Advantages:

-  **Multifunctionality**
Simultaneously monitor for gas leaks, fires, flare irregularities, intruders and more
-  **Integrability**
With 3rd Party Systems through industrial standard protocols such as: MODBUS TPC, OPC, RTSP, ONVIF
-  **Scalability**
Multiarchitecture, ideal for any type and size of installation
-  **Data Integrity**
Self-contained, closed-loop system architecture without cloud dependency
-  **Cost Effectiveness**
Avoid costly regulatory fines, environmental disasters and product loss

Architecture Cases

All our system architectures are:

- ✓ Fully customizable to operator needs
- ✓ Easily integrated into other industrial systems
- ✓ Optionally cloud-based
- ✓ Already field proven



Mileva Fixed Series



Accurate and reliable continuous monitoring for methane, other hydrocarbons, CO₂ and CO

Mileva Fixed Series cameras are the latest models of Optical Gas Imagers built for micro-leak detection of hydrocarbon (H_xC_x) gases. The spectrally optimized cooled detector improves the Minimum Detectable Leak Rate (MDLR) better than 0,4 g/h of CH₄.



Gas Detection



Gas Quantification



Intelligent Thermography



Surveillance



RedLook Camera AI Analytics



Integration Rest API, Cloud Services, IoT



ATEX Zone I Housing Available



Instant & Accurate Alarms

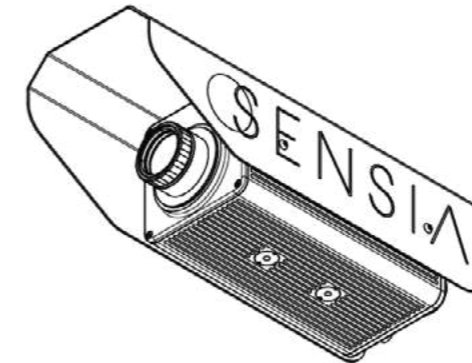


Automatic Reporting

REDLOOK Technology

RedLook is implemented in SENSIA's line of fixed systems for 24/7 monitoring. This comprehensive autonomous monitoring system presents innovative capabilities assembled under a single control software.

*Please see pages 50-51 for a complete list of detected gases.



Specifications			
Models	33F	45F	47F
FPA	Cooled 640 x 512 px		
Pixel Pitch	15 µm		
NETD	<15mK @ +50°C		
Spectral Region	3,2 to 3,4 µm	4,2 to 4,4 µm	4,5 to 4,7 µm
Lenses	25 mm 35 mm 50 mm		
Zoom	Digital Zoom		
Temperature Meas. Accuracy	± 1°C (from 0°C to 250°C Scene Temp.)		
Data Protocol	GigE 9 Hz / 25 Hz		
Power	24 VDC @ 2.5 A		
Weight	4,9 kg		
Size	350 x 121 x 111 mm		
Operating Temp. Range	-10°C to +50°C		
Storage Temp. Range	-40°C to +71°C		
Minimum Detectable Leak Rate (CH ₄)	0,4 g/h		
Certifications	IP66 (EN 60529) EMC EN61000-6-3:2007 II 2 G Ex db op pr IIC T6 Gb LVD: EN 60950-1:2006 + A11:2009 RoHS: 2011/65/EU WEEE: 2012/19/EU		
Features Under Demand			
Temperature Range	Customized		
Communication	Wireless Supported		
Anticorrosion Housing	Contact us for further details		
Pan & Tilt			
SMART Model			
ATEX Housing Options			

Caroline Fixed Series



Accurate and reliable continuous monitoring for methane, SO₂, SF₆, methanol and refrigerants

Caroline fixed series integrates the latest technology in uncooled infrared detectors, offering consistent and error-free performance. It is the most complete system for continuous monitoring of environments involving SF₆, methane, methanol, sulfur dioxide, ammonia, VOC's and refrigerant gas leaks. In addition, Caroline series cameras provide flame detection, intelligent thermography, and surveillance to further boost security.



Gas Detection



Gas Quantification



Surveillance



Intelligent Thermography



Flame Detection



RedLook Camera AI Analytics



Integration Rest API, Cloud Services, IoT



ATEX Zone I Housing Available



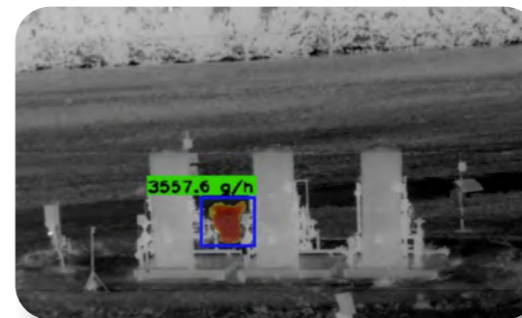
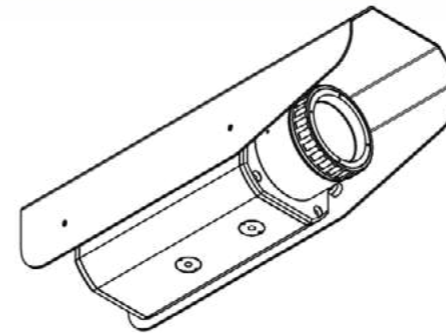
Instant & Accurate Alarms



Automatic Reporting

REDLOOK Technology

RedLook is implemented in SENSIA's line of fixed systems for 24/7 monitoring. This comprehensive autonomous monitoring system presents innovative capabilities assembled under a single control software.



*Please see pages 50-51 for a complete list of detected gases.

Specifications			
Models	FY	FX	FX Y
FPA	Uncooled 640 x 480 px		
Pixel Pitch	17 μm		
NETD	<22mK @ +30°C		
Spectral Region	7 to 9,5 μm	8 to 14 μm	7 to 14 μm
Lenses	20 mm 35 mm 50 mm		
Zoom	Digital Zoom		
Temperature Meas. Accuracy	± 0°C (from 0°C to 60°C Scene Temp.)		
Data Protocol	GigE 9 Hz / 25 Hz		
Power	<3 watts; PoE (power over ethernet) 9v-48v		
Weight	2,8 kg		
Size	97 x 110 x 330 mm		
Operating Temp. Range	-20°C to +50°C		
Storage Temp. Range	-40°C to +71°C		
Certifications	IP66 (EN 60529) EMC (EN 61326:2013) II 3G Ex ec IIC T4 Gc -20°C ≤ Tamb ≤ +50°C EN 60079-0:2012 + A11:2013; EN 60079-7:2015		
Features Under Demand			
Temperature Range	Customized		
Auxiliar Power Supply	12 VDC (instead of PoE)		
Communication	Wireless Supported		
Anticorrosion Housing	Contact us for further details		
Pan & Tilt			
SMART Model			
ATEX Housing Z1			

Methane Laser+OGI

Powerful OGI + Methane Laser Monitoring System

Our Methane Laser + OGI is the first combined system based on an infrared camera and a laser for methane detection and quantification in both ppm·m of methane and flow rate of other gases. Integrated with the latest laser and QOGI technology, it is the most complete system for constant monitoring of environments with risks of CH₄.



Gas Detection



Gas Quantification



Surveillance



Intelligent Thermography



Flame Detection



RedLook Camera AI Analytics



Integration Rest API, Cloud Services, IoT



ATEX Zone I Housing Available



Instant & Accurate Alarms



Automatic Reporting

REDLOOK Technology

RedLook enables exhaustive monitoring and real-time alerting. It is highly versatile, allowing to configure several Regions of Interest (RoI) within the area to be monitored. RedLook can assign a functionality to each configured RoI, granting a total and safe surveillance of the installation.

Specifications

Models	Caroline FYL	Caroline FXYL	Mileva 33 FL
FPA	Uncooled 640 x 480 px		Cooled 640 x 512 px
Pixel Pitch	17 µm		15 µm
NETD	<22mK @ +30°C		<15mK @ +50°C
Spectral Region	7 to 9,5 µm	7 to 14 µm	3,2 to 3,4 µm
Lenses	20 mm 35 mm 50 mm		25 mm 35 mm 50 mm
Zoom	Digital Zoom		
Temperature Meas. Accuracy	± 0°C (from 0°C to 60°C Scene Temp.)		± 1°C (fr m 0°C to 250°C Scene Temp.)
Data Protocol	GigE 9 Hz / 60 Hz		
Power	<3 watts; PoE (power over ethernet) 9v-48v		12 watts
Weight	42 kg		
Size	423 x 428 x 315 mm		
Operating Temp. Range	-20°C to +50°C		-10°C to +50°C
Storage Temp. Range	-40°C to +71°C		

See pages 35, 37 for certifications

Methane Laser Specifications

Range	100 m
Measurement Performance	<50000 ppm·m : Accuracy ± 10 %
Resolution	1 ppm
Certification	II 2G Ex d IIC T6 Gb

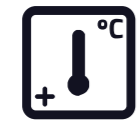
Pan & Tilt Specifications

Mounting	4 x Ø11mm on 195 PCD
Backlash	<0,1°
Max. Preset Accuracy	0,5°
Power	230 - 120 VAC, 75 W

CalcifIR F

Reliable Multi-Flare and Component Temperature Monitoring System

CalcifIR F autonomously monitors the operating conditions of flare tips and pilot flames while also conducting preventative maintenance on other components via intelligent thermography, activating security protocols according to preset configurations. Flare stacks can be a subject to changing weather or input conditions, requiring monitoring to assure operational safety and component integrity.



Intelligent Thermography



Flare Monitoring



Automatic Reporting



RedLook Camera AI Analytics



Integration Rest API, Cloud Services, IoT



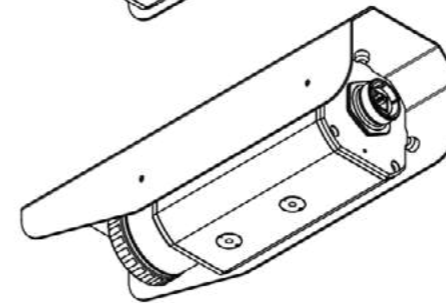
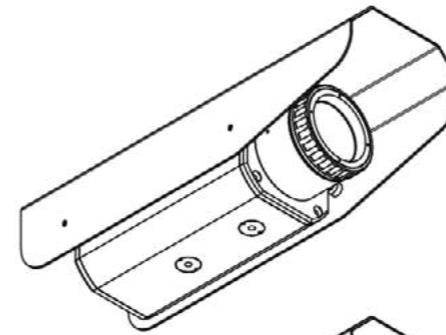
ATEX Zone I Housing Available



Instant & Accurate Alarms

REDLOOK Technology

CalcifIR F's performance lets RedLook enable exhaustive monitoring and real-time alerting. Being highly versatile, easily configure several Regions of Interest (RoI) within the area to be monitored. And to each one of them, assign a functionality, granting a complete surveillance of flares, pilot flames and components.

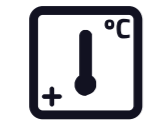


Specifications	
FPA	640 x 480 px 384 x 288 px
Pixel Pitch	12 μm
NETD	<50mK @ +30°C
Lenses	5,5 mm 7 mm 9 mm 15 mm 20 mm 35 mm 50 mm
Zoom	Digital Zoom
Temperature Meas. Accuracy	± 1°C or 1% WIG (from 50°C to 500°C) ± 2°C or 2% WIG (from 500°C to 1500°C)
Data Protocol	GigE 9 Hz / 25 Hz
Power	<3 watts; PoE (power over ethernet) 9v-48v)
Weight	3 kg
Size	97 x 110 x 330 mm
Operating Temp. Range	-20°C to +50°C
Storage Temp. Range	-40°C to +71°C
Certifications	IP66 (EN 60529) EMC (EN 61326:2013) II 3G Ex ec IIC T4 Gc -20°C ≤ Tamb ≤ +50°C EN 60079-0:2012 + A11:2013; EN 60079-7:2015
Features Under Demand	
Lenses	From 100 mm to 150 mm
Temperature Range	Customized
Relay	Hot relay contact on site
Auxiliar Power Supply	12 VDC (instead of PoE)
Communication	Wireless Supported
Anticorrosion Housing	Contact us for further details
Pan & Tilt	
SMART Model	
ATEX Housing Z1	

CalcifIR **RXF**

Advanced Furnace Monitoring Solution

CalcifIR RXF technology is based on an infrared camera prepared to accurately measure temperatures through flames. In situations of intense fire, when nothing beyond the flames can be seen, CalcifIR RXF is able to ignore the spectral range of the flame, passing through and providing an precise temperature measurement.



Intelligent Thermography



Furnace Inspection



Automatic Reporting



RedLook Camera AI Analytics



Integration Rest API, Cloud Services, IoT



ATEX Zone I Housing Available



Instant & Accurate Alarms

REDLOOK Technology

CalcifIR RXF's assembly includes a durable housing prepared to withstand high temperatures using compressed air. This feature is paramount for thermography technology in harsh environments. No need for any external equipment such as thermocouples.

Specifications	
FPA	640 x 480 px
Pixel Pitch	17 μm
NETD	<50mK @+30°C
Zoom	Digital Zoom
Temperature Meas. Accuracy	± 20°C or 4% WIG (from 400°C to 1500°C)
Data Protocol	GigE 9 Hz / 25 Hz
Power	<3 watts; PoE (power over ethernet) 9v-48v
Weight	4,5 kg
Size	177 x 179 x 370 mm
Operating Temp. Range	-10°C to +50°C
Storage Temp. Range	-40°C to +71°C
Certifications	IP66 (EN 60529) EMC (EN 61326:2013) II 3G Ex ec IIC T4 Gc -20°C ≤ Tamb ≤ +50°C EN 60079-0:2012 + A11:2013; EN 60079-7:2015
Features Under Demand	
Auxiliar Power Supply	12 VDC (instead of PoE)
Communication	Wireless Supported
Anticorrosion Housing	Contact us for further details
Pan & Tilt	
SMART Model	
ATEX Housing Options	
Air Refrigerated Housing	

Agni

The Exemplary Flare Efficiency Monitoring Solution



Agni is SENSIA's unique bispectral fixed system specifically designed for 24/7 monitoring of flared gases and pilot flames. Remotely quantify the Destruction & Removal Efficiency (DRE) of any flare with Agni, the only non-intrusive solution for 24/7 accurate flare efficiency monitoring for environmental regulation compliance.



Flare Efficiency



Flare Monitoring



Automatic Reporting



RedLook Camera AI Analytics



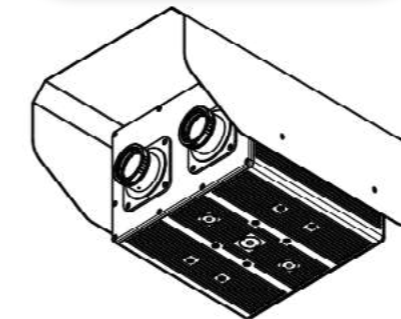
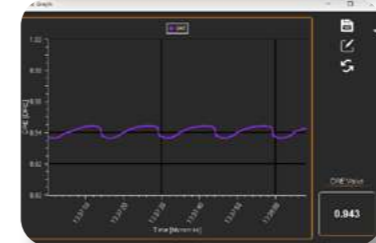
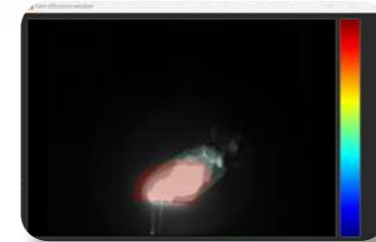
Integration Rest API, Cloud Services, IoT



Instant & Accurate Alarms

REDLOOK Technology for Flare Efficiency

RedLook's Flare Efficiency functionality, a unique solution to retrieve the DRE of flares, is fully implemented in the Agni flare efficiency monitoring system. This full monitoring and reporting solution is built with environmental reporting in mind, given that new regulation in the United States and the European Union includes minimum flare efficiency requirements.



Specifications

FPA	2x Cooled 640 x 512 px
Pixel Pitch	15 μm
NETD	<15mK @ +50°C
Lenses	50 mm
Zoom	Digital Zoom
Data Protocol	GigE 9 Hz / 25 Hz
Power	24 VDC @ 2.5 A
Weight	8 kg
Size	370 x 250x 165 mm
Operating Temp. Range	-10°C to +50°C
Storage Temp. Range	-40°C to +71°C
Certifications	IP65 (EN 60529)

Features Under Demand

Optional Lenses	100 mm
Communication	Wireless Supported
Pan & Tilt	Contact us for further details
SMART Model	
ATEX Housing Z1	

Rai

Dependable 24/7 Flame Detection System

Rai Smartcam is SENSIA's latest camera specialized in simultaneous fire detection, surveillance, and intelligent thermography. Inside the RedLook Flame Detection functionality, SENSIA provides the most effective applications in boosting safety and security with visual confirmation and no false alarms.



Flame Detection



Intelligent Thermography



Surveillance



Automatic Reporting



RedLook Camera AI Analytics



Integration Rest API, Cloud Services, IoT



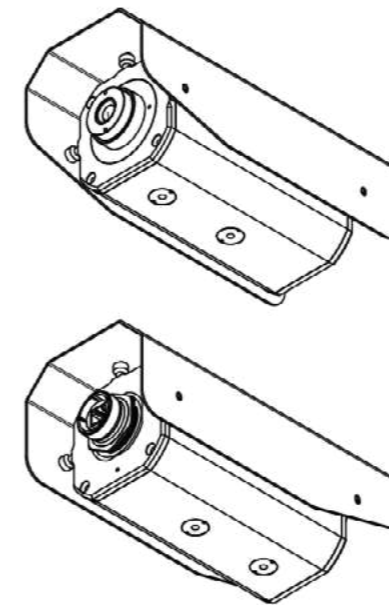
ATEX Zone I Housing Available



Instant & Accurate Alarms

REDLOOK Technology

SENSIA provides the most effective applications in boosting safety and security with visual confirmation and no false alarms.



Specifications	
FPA	640 x 480 px 384 x 288 px
Pixel Pitch	12 μm
NETD	<50mK @ +30°C
Lenses	5,5 mm 7 mm 9 mm 15 mm 20 mm 35 mm 50 mm
Zoom	Digital Zoom
Temperature Meas. Accuracy	± 2°C or 2% WIG (from 0°C to 120°C)
Data Protocol	GigE 9 Hz / 25 Hz
Power	24VDC @6A
Weight	3.2kg
Size	97 x 110 x 330 mm
Operating Temp. Range	-10°C to +50°C
Storage Temp. Range	-40°C to +71°C
Certifications	IP66 (EN 60529) EMC (EN 61326:2013) II 3G Ex ec IIC T4 Gc -20°C ≤ Tamb ≤ +50°C
Features Under Demand	
Optional Lenses	From 5 mm to 150 mm
Auxiliar Power Supply	12 VDC (instead of PoE)
Temperature Range	Customized
Communication	Wireless Supported
Anticorrosion Housing	Contact us for further details
Pan & Tilt	
SMART Model	
ATEX Housing Options	

Vido

Trusted 24/7 Surveillance System

Vido is the most reliable and cost-effective camera for 24/7 surveillance and intelligent thermography. Vido is available in different array formats. Inside RedLook Surveillance functionality, SENSIA provides some of the most effective applications in terms of safety and security including people, vehicle and object detection, tracking and counting while enforcing customizable prohibited area protocols.



Automatic Reporting



Surveillance



Intelligent Thermography



RedLook Camera AI Analytics



Integration Rest API, Cloud Services, IoT



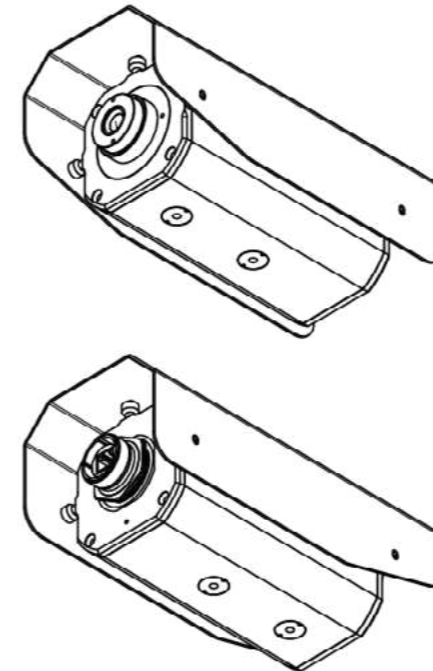
ATEX Zone I Housing Available



Instant & Accurate Alarms

REDLOOK Technology

SENSIA provides the most effective applications in boosting safety and security with visual confirmation and no false alarms.



Specifications	
FPA	640 x 480 px 384 x 288 px
Pixel Pitch	12 μm
NETD	<50mK @ +30°C
Lenses	7,5 mm 14 mm 20 mm 25 mm 35 mm 50 mm
Zoom	Digital Zoom
Temperature Meas.Accuracy	± 2°C or 2% WIG (from 0°C to 120°C)
Data Protocol	GigE 9 Hz / 25 Hz
Power	<3 watts; PoE (power over ethernet) 9v-48
Weight	3kg
Size	97 x 110 x 330 mm
Operating Temp. Range	-20°C to +50°C
Storage Temp. Range	-40°C to +71°C
Certifications	IP66 (EN 60529) EMC (EN 61326:2013) II 3G Ex ec IIC T4 Gc EN 60079-0:2012 + A11:2013; EN 60079-7:2015
Features Under Demand	
Optional Lenses	From 5 mm to 150 mm
Auxiliar Power Supply	12 VDC (instead of PoE)
Temperature Range	Customized
Communication	Wireless Supported
Anticorrosion Housing	Contact us for further details
Pan & Tilt	
SMART Model	
ATEX Housing Options	

Gases We Detect

Not all detectable gases within the mentioned spectral ranges are listed in the tables provided.

Contact us to learn more.

Mileva 45F Gases Detected

Carbon Dioxide	CO ₂
Phosphine	H ₃ P

Mileva 47F Gases Detected

Carbon Monoxide	CO
Nitrous Oxide	N ₂ O

Mileva 33F Gases Detected

1,3-Butadiene	C ₄ H ₆
Acetic Acid	C ₂ H ₄ O ₂
Benzene	C ₆ H ₆
Butane	C ₄ H ₁₀
Ethane	C ₂ H ₆
Ethanol	C ₂ H ₆ O
Ethyl Hexyl Acrylate	C ₁₁ H ₂₀ O ₂
Ethylbenzene	C ₈ H ₁₀
Ethylene	C ₂ H ₄
Ethylene Glycol	C ₂ H ₆ O ₂
Ethylene oxide	C ₂ H ₄ O ₂
Heptane	C ₇ H ₁₆
Hexane	C ₆ H ₁₄
MEK	C ₄ H ₈
Methanal	CH ₂ O
Methane	CH ₄
Methanol	CH ₄ O
Octane	C ₈ H ₁₈
Pentane	C ₅ H ₁₂
Phenol	C ₆ H ₆ O
Propane	C ₃ H ₈
Propylene	C ₃ H ₆
Toluene	C ₇ H ₈
Turpentine	C ₁₀ H ₁₆

Caroline Fixed Gases Detected

	Caroline FX	Caroline FY	Caroline FXY
1,3-Butadiene	●		●
Acrolein	●	●	●
Acrylic Acid	●	●	●
Ammonia	●		●
Ethanol	●		●
Ethyl Hexyl Acrylate	●	●	●
Ethylene	●		●
Ethylene Glycol	●		●
Ethylene Oxide	●		●
Isoprene	●		●
Methanol	●		●
Nitrogen trifluoride	●		●
Phenol	●	●	●
R11,R12,R13,R123	●	●	●
R125	●		●
R134A	●	●	●
R13B1	●		●
R417A		●	●
R422A	●		●
Sulfur Dioxide		●	●
Sulfur Hexafluoride	●		●
Vinyl Chloride		●	●
Acetic Acid		●	●
Nitrous Oxide		●	●
Methane		●	●
R508A		●	●
Propylene		●	●

Our **Services**

Contact us about any of the following services:

- **RedLook Proactive Software Maintenance and Updates**

We are always fine-tuning and upgrading our software for better performance while remote assistance is also available.

- **RedLook Reactive Service**

Real-time, immediate remote support or on-site assistance for technical incidences directly affecting the RedLook system.

RedLook Dashboard

Optional and customizable web or on-premise application built to your needs to better analyze the most relevant RedLook data.

- **RedLook Academy**

Gain hands-on experience and learn about our infrared imaging technology at our Madrid headquarters.

- **Pilots**

Speak with us about the project you have in mind.



The logo for SENSIA features a solid orange circle on the left, partially overlapping the letter 'S'. The word 'SENSIA' is written in a white, uppercase, sans-serif font to the right of the circle.

SENSIA

AI-Powered Infrared Imaging

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SENSIA



ENCINO
ENVIRONMENTAL
SERVICES

Encino Environmental Services - Authorized SENSIA Partner

www.encinoenviron.com

support@encinoenviron.com

+1(281)-201-3544

