

# Caroline **FY**

## Cost-effective and reliable continuous monitoring for methane and SO<sub>2</sub>



Caroline FY integrates the latest technology in uncooled infrared detectors, offering consistent and cost-effective performance for methane and SO<sub>2</sub> detection and leak rate quantification. It is the most complete system for continuous monitoring of industrial environments while also providing flame detection, intelligent thermography, and surveillance to further boost plant safety and 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

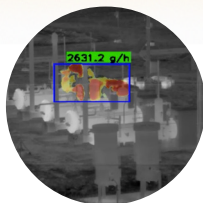
Caroline FY is a part of our AI-powered RedLook solution for exhaustive continuous monitoring and real-time alerting. RedLook is highly versatile, allowing operators to configure several Regions of Interest (RoI) within the area to be autonomously monitored. RedLook can assign a functionality to each configured RoI, granting a complete and safe surveillance of the installation.

## Technology Data Sheet



### Instant gas visualization

Simply set up a ROI then instantaneously detect, visualize and quantify gas leaks.



### AI-powered flow rate quantification

Accurate gas flow rate quantification based on our established neural networks and scenario based training



### Hot spot saturation

Simultaneously monitor operating temperatures of components



### Temperature indicator

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

### Caroline FY Specifications

FPA	Uncooled 640 x 480 px
Pixel Pitch	17 µm
NETD	<22mK @ +30°C
Spectral Region	7 to 9,5
Lenses	20 mm   35 mm   50 mm
Zoom	Digital Zoom
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

Scanning	Pan & Tilt
Temperature Range	Customized
Relay	Hot relay contact on site
Auxiliar Power Supply	12 VDC (instead of PoE)
Communication	Wireless Supported
SMART Model	Contact us for further details

### Gases detected

Acetic Acid	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>
Acrolein	C <sub>3</sub> H <sub>4</sub> O
Acrylic Acid	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>
Ethyl Hexyl Acrylate	C <sub>11</sub> H <sub>20</sub> O <sub>2</sub>
Methane	CH <sub>4</sub>
Nitrous Oxide	N <sub>2</sub> O
Phenol	C <sub>6</sub> H <sub>6</sub> O
R12	CCl <sub>2</sub> F <sub>2</sub>
R123	C <sub>2</sub> HCl <sub>2</sub> F <sub>3</sub>
R125	CHF <sub>5</sub>
R13	CClF <sub>3</sub>
R134A	C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>
R13B1	CBrF <sub>3</sub>
R417A	Mixture of C <sub>2</sub> HF <sub>5</sub> , C <sub>2</sub> H <sub>2</sub> F <sub>4</sub> , C <sub>4</sub> H <sub>10</sub>
R422A	Mixture of C <sub>2</sub> HF <sub>5</sub> , C <sub>2</sub> H <sub>2</sub> F <sub>4</sub> , C <sub>4</sub> H <sub>10</sub>
R508A	C <sub>2</sub> F <sub>6</sub>
Sulfur Dioxide	SO <sub>2</sub>
Propylene	C <sub>3</sub> H <sub>6</sub>
Vinyl Chloride	C <sub>2</sub> H <sub>3</sub> Cl

**Specifications are subject to change.**

For the most up-to-date specifications, please email us: [contact@sensia-solutions.com](mailto:contact@sensia-solutions.com)

#### HEADQUARTERS

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