

Caroline **FY**

Cost-effective and reliable continuous monitoring for methane and SO₂



Caroline FY integrates the latest technology in uncooled infrared detectors, offering consistent and cost-effective performance for methane and SO₂ 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.

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
Atex Housing Zone 1	

Caroline FY Gases detected

Acetic Acid	$C_2H_4O_2$
Acrolein	C_3H_4O
Acrylic Acid	$C_5H_8O_2$
Ethyl Hexyl Acrylate	$C_{11}H_{20}O_2$
Methane	CH_4
Nitrous Oxide	N_2O
Phenol	C_6H_6O
R12	CCl_2F_2
R123	$C_2HCl_2F_3$
R125	CHF_5
R13	$CClF_3$
R134A	$C_2H_2F_4$
R13B1	$CBrF_3$
R417A	Mixture of C_2HF_5 , $C_2H_2F_4$, C_4H_{10}
R422A	Mixture of C_2HF_5 , $C_2H_2F_4$, C_4H_{10}
R508A	C_2F_6
Sulfur Dioxide	SO_2

Specifications are subject to change.

For the most up-to-date specifications, please email us: contact@sensia-solutions.com