

Caroline FYL

OGI + Methane laser monitoring system



The Caroline FYL is the first combined system based on a camera and a laser for methane detection and quantification. Integrated with the latest technology in uncooled infrared detectors, it is a unique solution providing consistent, error-free performance.



Viper Optic
AI Analytics



Integration
Rest API, Cloud Services, IoT



ATEX Certification
II 3G Ex ec IIC T4 Gc



Real Time Alarms
Modbus, OPC, Hot Relay

ViperOptic technology

ViperOptic is fully integrated in SENSIA's line of fixed systems for 24/7 monitoring. This comprehensive monitoring system presents a host of innovative capabilities assembled under a single control software:



Gas Detection
Highest detection probability and lowest false alarm rates



Flame Detection
The most reliable tool for fire anticipation and early warning



Gas Quantification
Determination of the ppm-m/mass flow rate of the detected gas



Spill Detection
Non-volatile hydrocarbons and spills detection



Surveillance
Thermal image processing for security and safety



Intelligent Thermography
Automatic temp control based on high-accuracy thermography



Tank Leveling
Automated tank level monitoring without opening the thief hatch



The introduction of the laser brings two added values that make the system a perfect solution for very precise monitoring: first, it confirms the existence of a gas leak and secondly, it quantifies the plume in ppm-m.

With the optional Pan & Tilt, a Tour option can be configured to allow the system to monitor different areas surrounding the system for the period of time the user determines.

Specifications	
FPA	Uncooled 640 x 480 px
Pixel Pitch	17 µm
NETD	<22mK @ +30°C
Spectral Region	7 to 9.5
Lenses	50 mm 35 mm 20 mm
Zoom	Digital Zoom
Accuracy	± 1°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	42 kg; 92.6 lb
Size	423 x 428 x 315 mm
Operating Temp. Range	-10°C to 50°C; 14°F to 122°F
Storage Temp. Range	-40°C to 71°C; -40°F to 160°F
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

Pan & Tilt Specifications	
Mounting	4XØ11 on 195 PCD
Backlash	<0,1°
Max. Preset Accuracy	0.5°
Power	230 - 120 VAC, 70 W

Laser Specifications	
Range	50 m; 164 ft
Measurement Performance	<50000 ppm·m : Accuracy ± 10 %
Certification	II 2G Ex d IIC T6 Gb

Gases detected	
Acetic Acid	C2H4O2
Acrolein	C3H4O
Acrylic Acid	C5H8O2
Ethyl Hexyl Acrylate	C11H20O2
Methane	CH4
Nitrous Oxide	N2O
Phenol	C6H6O
R12	CCl2F2
R123	C2HCl2F3
R125	C2HF5
R13	CClF3
R134A	C2H2F4
R13B1	CBrF3
R417A	Mixture of C2HF5, C2H2F4, C4H10
R422A	Mixture of C2HF5, C2H2F4, C4H10
R508A	C2F6
Sulfur Dioxide	SO2

Specifications are subject to change.

For the most up-to-date specs, please contact your salesperson.

Contact us!

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