



# FLIR G620a

## Fixed-Mount Hydrocarbon/VOC Optical Gas Imaging (OGI) Camera

[www.flir.com/products/G620a](http://www.flir.com/products/G620a)



### Gases Detected

Hydrocarbons, methane ( $\text{CH}_4$ ), and other Volatile Organic Compound (VOC) emissions

### Key Features

- Unmatched image clarity to visualize even small gas leaks thanks to high-resolution, high sensitivity cooled sensor
- Rely on consistent monitoring with more than 27,000 hours of runtime needed before service (mean time to failure)
- Connect and run cameras easily through included web interface, available software development kits (SDKs), and industry-standard protocol GigE vision

### Main Applications

- Meet methane and VOC detection sensitivity requirements set forth in U.S. EPA 0000a and Appendix K
- Achieve global ESG pledges to reduce hydrocarbon and methane emissions
- Mitigate emission events where methane is low in overall gas composition percentage

### SPECIFICATIONS

Imaging and optical	
IR resolution	640 × 512
Field of view (FOV)	6° lens: 6° × 4.8° 14.5° lens: 14.4° × 11.5° 24° lens: 23.6° × 19°
Focal length	6° lens: 92 mm 14.5° lens: 38 mm 24° lens: 23 mm
Minimum focus distance	6° lens: 2 m 14.5° lens: 0.5 m 24° lens: 0.3 m
Focus	Motorized
Zoom	Digital zoom, 1x, 2x, 4x, 8x
Digital image enhancement	High sensitivity mode (HSM)
Detector type	High Operating Temperature (HOT) MWIR T2SLS
Spectral range	3.2–3.4 $\mu\text{m}$
Detector pitch	15 $\mu\text{m}$
F/#	f/1.59
Frame rate	30 Hz
Sensor cooling	FLIR FL100 Linear cooler
Image modes	IR image, high sensitivity mode (HSM)
Automatic image adjustment	Linear, PE
Color palettes	Selectable 8-bit
Overlay	RTSP Only

Specifications subject to change. For the most up-to-date specifications, please visit [flir.com](http://flir.com).

Measurement & Analysis	
Thermal sensitivity (NETD)	<15 mK at 25°C
Temperature measurement range	-10°C to 120°C
Temperature measurement sub-ranges	-10°C to 30°C 10°C to 60°C 30°C to 80°C 55°C to 120°C
Ambient drift compensation (with factory calibration)	Yes
Accuracy	$\leq 100^\circ\text{C} \pm 2^\circ\text{C}$ , $>100^\circ\text{C} \pm 2\%$ of reading
Gas sensitivity	NECL: 1 m $\Delta T$ 10°C Methane: 16 ppm × m Hydrocarbons (niabara gas mix): 6.4 ppm × m
Communication & Data Storage	
Synchronization modes	Sync In
Radiometric IR video recording	None
Non-radiometric IR recording	None
Radiometric IR video streaming	GigE Vision
Non-radiometric IR video streaming	H.264 or MJPEG over RTSP
Command & control	GEV: Genicam; RTSP: Web Interface, REST API
Storage media	None
Digital I/O connector type	M12 12-pin A-coded, Male (shared with external power)
Digital inputs	2x opto-isolated, Vin(low)= 0–1.5 V, Vin(high)= 3–25 V
Digital outputs	3x opto-isolated, 0–48 V DC, max. 350 mA; solid-state opto relay; 1x dedicated as Fault output (NC)
Communication interfaces	Ethernet

For technical or sales support, please visit:  
[www.flir.com/about/general-inquiries](http://www.flir.com/about/general-inquiries)

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### SPECIFICATIONS, CONT.

Power	
Primary power source	PoE+ Type 2 (30 W min)
Optional DC power connection	M12 12-pin A-coded, male (shared with Digital I/O)
Power consumption	25 W (cool down)
DC voltage range	18 V-56 V
Environmental & Certifications	
Operating temperature range	-20°C to 50°C
Directives	EMC: 2014/30/EU, WEEE: 2012/19/EU
EMC	EN55032:2015/A11:2020 EN55035:2017/A11:2020 FCC Part 15, Subpart B Class A KC C 9832 and KS C 9835
Encapsulation	IP50
Vibration	10-58 Hz, 0.15 mm; 58-500 Hz, 2 g; 5 cycles, 1 oct/min; X,Y&Z (IAW MIL-STD-810H)
Shock	25 g, 6 ms; Half sine; ± 500 shocks; X,Y&Z (IAW MIL-STD-810H)
General	
Camera size w/o lens	200 × 76 × 92 mm (7.9 × 3.0 × 3.6 in)
Camera size w/lens	With 6° lens: 297 × 99 × 99 mm (11.7 × 3.9 × 3.9 in) With 14.5° lens: 229 × 76 × 95 mm (9.0 × 3.0 × 3.8 in) With 24° lens: 229 × 76 × 95 mm (9.0 × 3.0 × 3.8 in)
Camera weight w/o lens	1.32 kg (2.9 lbs)
Camera weight w/lens	With 6° lens: 1.90 kg (4.14 lbs) With 14.5° lens: 1.48 kg (3.22 lbs) With 24° lens: 1.50 kg (3.27 lbs)
Mounting	w/Mounting plate - 2 × 1/4"-20 tapped holes, 1 × 3/8"-16 tapped hole, 4 × #10-24 tapped holes w/o Mounting plate - 6 × #6-32
Box Contents	Camera w/lens; M12 to RJ45F Cable (0.3m), quick start guide, certificate of calibration

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