



FLIR G620a

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

www.flir.com/products/G620a



Gases Detected

Hydrocarbons, methane (CH₄), 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 μm
Detector pitch	15 μm
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
Measurement & Analysis	
Thermal sensitivity (NETD)	<15 mK at 25°C
Temperature measurement range	-10°C to 120°C

Specifications subject to change. For the most up-to-date specifications, please visit flir.com.

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	≤100°C ±2°C, >100°C ±2% of reading
Gas sensitivity	NECL: 1 m ΔT 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
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

For technical or sales support, please visit:
www.flir.com/about/general-inquiries

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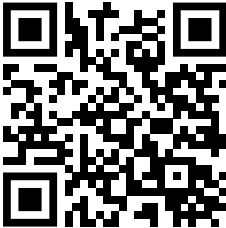
SPECIFICATIONS, CONT.

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 ClassA 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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