

INTRINSICALLY
SAFE

FLIR GFx320™

*Infrared Camera for Methane,
Hydrocarbon, and VOC Detection*



The FLIR GFx320 represents groundbreaking optical gas imaging technology for detecting methane, other hydrocarbons, and volatile organic compound (VOC) emissions in areas such as well sites and offshore platforms.

Hazardous-Location Certified

The GFx320 is independently certified as Intrinsically Safe and third-party approved for use in hazardous locations. The oil and gas market has long awaited this gas detection solution, as its Intrinsically Safe designation allows the user to work quickly and confidently, and scan for fugitive emissions in more areas than ever before.

Greater Emission Reductions – Increased Profits

The GFx320 visualizes incredibly small hydrocarbon gas leaks with the sensitivity needed to comply with the US EPA's OOOOa methane rule. Surveyors can use the GFx320 to scan large areas and check thousands of components over the course of one inspection. The digital camera and automatic GPS tagging ensure you'll meet reporting requirements without the need for extra equipment. By fixing gas leaks quickly, you can save your company thousands in lost gas and lost profits while improving regulatory compliance and protecting the environment.

Superior Gas Visualization

The FLIR GFx320 is unbeatable at visualizing gas leaks, so you can pinpoint the exact source of fugitive emissions. The High Sensitivity Mode uses proprietary video processing techniques to accentuate plume movement for a fivefold increase in leak detectability. In addition, the GFx320 is capable of measuring temperatures up to 350°C with an accuracy of $\pm 1^\circ\text{C}$. This is critical for assessing thermal contrast between the gas compound and the background scene.

Innovative Ergonomic Design

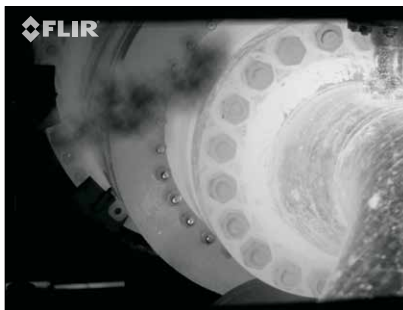
The GFx320 is ergonomically designed with the operator in mind, with a tiltable viewfinder, articulating LCD screen, and rotating handgrip. The camcorder-style construction allows the user to maintain three points of contact during operations, taking the strain out of a full day of surveys.

The GFx320 can detect more than 400 gas compounds, including:

| | | | |
|-----------|-----------|----------|--------------|
| Methane | Methanol | Propane | Benzene |
| Ethane | Propylene | Ethanol | Pentane |
| 1-Pentene | Isoprene | Butane | Ethylbenzene |
| MEK | MIBK | Toluene | Octane |
| Heptane | Xylene | Ethylene | Hexane |



Venting pressure relief valve on storage tank



Natural gas leak on compressor valve



Methane leak at natural gas production site



Specifications

| Model | | 6Fx320 |
|-------------------------------|---|---------------|
| Detector Type | FLIR Indium Antimonide (InSb) | |
| Spectral Range | 3.2 – 3.4 μ m | |
| IR Resolution | 320 x 240 pixels | |
| Detector Pitch | 30 μ m | |
| NETD/Thermal Sensitivity | <15 mK @ 30°C (86°F) | |
| Sensor Cooling | Stirling Microcooler (FLIR MC-3) | |
| Hazardous Location Compliance | ATEX/IECEX, Ex ic nC op is IIC T4 Gc II 3 G ANSI/ISA-12.12.01-2013, Class I Div 2 CSA 22.2 No. 213, Class I Div 2 | |
| Electronics / Imaging | | |
| Image Modes | IR image, visual image, High Sensitivity Mode (HSM) | |
| Frame Rate (Full Window) | 60 Hz | |
| Dynamic Range | 14-bit | |
| Radiometric IR Video | 15 Hz direct to memory card | |
| Non-Radiometric IR Video | MPEG4 (up to 60 min./clip) to memory card | |
| Visual Video | MPEG4 (25 min./clip) to memory card | |
| Visual Image | 3.2 MP from integrated visible camera Can be automatically associated with corresponding non-radiometric IR video | |
| GPS | Location data stored with every image | |
| Measurement | | |
| Standard Temperature Range | –20°C to 350°C (–4°F to 662°F) | |
| Accuracy | \pm 1°C (\pm 1.8°F) for temperature range (0°C to 100°C, 32°F to 212°F) or \pm 2% of reading for temperature range (>100°C, >212°F) | |
| Optics | | |
| Camera f/number | f/1.5 | |
| Available Fixed Lenses | 14.5° (38 mm), 24° (23 mm) | |
| Focus | Manual | |
| Image Presentation | | |
| On-Camera Displays | Widescreen 800 x 480 pixel LCD Tilttable 800 x 480 pixel OLED viewfinder | |
| Automatic Image Adjustment | Continuous/manual, linear, histogram | |
| Image Analysis | 10 spotmeters, 5 boxes with max./min./average, profile, delta temperatures, emissivity & measurement corrections | |
| Color Palettes | Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC | |
| Zoom | 1-8x continuous digital zoom | |
| General | | |
| Operating Temperature Range | –20°C to 50°C (–4°F to 122°F) | |
| Ambient Temperature Range | –20°C to 40°C (–4°F to 104°F) (Certification range for explosive atmospheres) | |
| Storage Temperature Range | –30°C to 60°C (–22°F to 140°F) | |
| Encapsulation | IP 54 (IEC 60529) | |
| Shock/ Vibration | 25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6) | |
| External Power Operation | AC adapter 90-260 VAC, 50/60 Hz or 12 VDC from a vehicle | |
| Battery Type | Rechargeable Li-ion battery | |
| Mounting | Standard, 1/4"-20 | |

Powersafe TiVision Ltd
 FLIR Distribution & Support
 Yateley Industries
 Mill Lane
 Yateley
 Hampshire
 GU46 7TF
 +44 (0)1291 635 561
 enquiries@flirvision.co.uk

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