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Приложение - Образец
за индикативно
предложение

Индикативно предложение по пазарна консултация № 42282 с предмет: "Доставка на оптичен елегаз (SF_6) детектор"

от

фирма: "АСМ Диагностика" ООД
ЕИК: 204354297
адрес: гр.София, ул."Стефан Караджа"№ 7, вх.Б, ет.1, ап.11
тел.: 02/987 49 60, 02/987 49 70
e-mail: office@acm-bg.com
лице за контакт: Ангел Ангелов, Управител

№ по ред	Описание и технически характеристики на предлаганото изделие	М.е.	К-во	Ед.цена без ДДС	Стойност без ДДС
1	Оптичен елегаз (SF_6) детектор	бр.	1	264 060.00лв.	264 060.00лв
					Обща стойност без ДДС

Срок на доставка: 6 - 8 седмици от датата на заявка
Условие на доставка: DDP Ваш склад
Гаранционен срок: 12 месеца
Производител: FLIR Systems
Съпроводителна документация при доставка: Приемо-предавателен протокол, калибрационен сертификат, гаранционна карта и оригинал на данъчна фактура
Документ за представителството: Приложено към документацията

05.11.2019г.
София

Подпис:
Ангел

Подпис:
Анатол

Характеристики на термовизионна камера за откриване на изтичания на изолационен SF_6 газ (елегаз)

Модел	**GF306**
	
Характеристики за заснемане на изображения	
Тип на детектора	Охлаждаем QWIP
Спектрална чувствителност	10.3 – 10.7 µm
Резолюция	320 × 240
Общ брой пиксели	76,800
Спектрален обхват	От 10.0 до 11.0 µm
Честота на опресняване	60Hz
Термочувствитлност	<15 mK при +30°C (+86°F)
Точност	±1°C (±1.8°F) за температурен обхват 0°C до +100°C (+32°F до +212°F) или ±2% показанието за температурен >+100°C (>+212°F)
Температурен диапазон	-40°C до 500°C (-40°F до 932°F)
Високотемпературна опция	Не е налична
Опции обективи	Стандартен 14.5° × 10.8°; Опционален: 24°
Увеличение	1-8x непрекъснато, цифрово увеличение
Фокус	Автоматичен или ръчен
Цветен LCD	4.3”; 800 × 480 пиксела
Регулируем визьор	Регулируем OLED, 800 × 480 пиксела
Цифрова камера със светкавица (2 бр.)	3.2 мегапиксела
Лазарна показалка	Да
Видео изход	HDMI
Анализи	
Спотметри	10
Зони	5 (мин./макс./ср. ст-т)
Профили	1 линия (хоризонтална или вертикална)
Delta T /темтературна разлика/	Да

ВЯРНО С ОРИ

Бележки	
GPS	Да, вграден
WiFi	Да, вграден
Съхранение	
Режими на работа	Инфрачервен, цифров, високочувствителен
Радиометричен JPG	Да, едновременно съхранение на термовизионни и цифрово изображение
Капацитет	Мин. 1200 изображения на SD карта памет, 2 слота за SD карти памет
Периодично заснемане	от 10 сек. до 24 часа
Радиометричен видео запис (15Hz)	Да, с включени 14-битови радиометрични данни, до 25 мин./клип
Нерадиометричен MPEG видео запис	Да, до 60 мин./клип
Обща информация	
Устойчивост на удар	25 g (IEC 60068-2-27)
Устойчивост на вибрация	2 g (IEC 60068-2-6)
Степен на защита	IP 54 (IEC 60529)
Тегло (с батерия и обектив)	2.48 кг
Окомплектовка	
Батерии	2 броя литиево-йонни акумулаторни батерии
Време на работа на батерия	>120 мин. непрекъсната работа
Зареждане на батериите	На отделна зарядна станция за две батерии, <2 часа за пълно зареждане
Софтуер	Софтуер за прехвърляне и обработка на изображения: изготвяне на доклад с шаблони, възможност за корекция на коефициент на излъчване, атмосферна и отразена температура, разстояние до обекта, относителна влажност, ръчна и автоматична корекция на ниво (level) и обхват (span), смяна на световите палитри, добавяне и редактиране на коментари към изображенията

Заличено на основание чл. 2 от ЗЗЛД

ВЯРНО

FLIR

FLIR GF-Series

FLIR GF306

For Gas Leak Detection of the "Greenhouse Gas" SF_6 and Electrical Inspections

FLIR GF306 is an infrared camera capable of finding Sulfur Hexafluoride (SF_6), the "greenhouse gas" with an estimated atmospheric lifetime of 3,200 years.

- *Real time visualization of gas leaks*
- *Finds SF_6 leaks quickly & safely*
- *Considerably reduced inspection time*
- *Trace leaks to their source*
- *Perform safer inspections*
- *Internal data/video storage*
- *Digital camera & GPS*
- *High performance LCD & Tiltable high resolution viewfinder*
- *Multi-angle handle with integrated direct access buttons*

Captured SF_6 leak

Visualizes gas leaks in real time
FLIR GF306 scans large areas rapidly and pinpoints leaks in real time. It is ideal for monitoring plants that is difficult to reach with contact measurement tools. Literally thousands of components can be scanned per shift without the need to interrupt the process. It reduces repair downtime and provides verification of the process. And above all it is exceptionally safe, allowing potentially dangerous leaks to be monitored from several meters away.

FLIR GF306 will significantly improve your work safety, environmental and regulatory compliance, not to mention helping to improve the bottom line by finding leaks that essentially decrease profits.

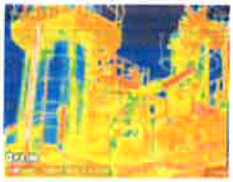
Detects the following gases:

- Sulfur Hexafluoride (SF_6)
- Acetyl Chloride
- Acetic Acid
- Allyl Bromide
- Allyl Chloride
- Allyl Fluoride
- Ammonia (NH_3)
- Bromomethane
- Chloride Dioxide
- Ethyl Cyanoacrylate
- Ethylene
- Furan
- Hydrazine
- Methylsilane
- Methyl Ethyl Ketone
- Methyl Vinyl Ketone
- Propenal
- Propene
- Tetrahydrofuran
- Trichloroethylene
- Uranyl Fluoride
- Vinyl Chloride
- Vinyl Cyanide
- Vinyl Ether

Tiltable, flip-out 4.3" High Contrast Color LCD allows you to view targets more safely from any angle.

Applications:

Electrical Utility



Petrochemical & Chemical industries

ВЯРНО

Automatic (one Touch) and Manual Focus with 1-8x continuous digital zoom helps you to deliver the perfect picture at ease.

FLIR GF306 Technical Specifications

Imaging and optical data	
Field of view (FOV) / Minimum focus distance	24° × 18° / 0.3 m
Lens identification	Automatic
F-number	1.5
Thermal sensitivity/NETD	<25 mK @ +30°C
Focus	Automatic (one touch) or manual (electric or on the lens)
Zoom	1–8× continuous, digital zoom
Digital image enhancement	Noise reduction filter, High Sensitivity Mode (HSM)
Focal Plane Array (FPA) / Spectral range	Cooled QWIP / 10–11 µm
IR resolution	320 × 240 pixels
Detector pitch	30 µm
Sensor cooling	Stirling Microcooler (FLIR MC-3)
Electronics and data rate	
Full frame rate	60 Hz
Image presentation	
Display	Built-in widescreen, 4.3 in. LCD, 800 × 480 pixels
Viewfinder	Built-in, tiltable OLED, 800 × 480 pixels
Automatic image adjustment	Continuous/manual; linear or histogram based
Manual image adjustment	Level/span
Image modes	IR-image, visual image, High Sensitivity Mode (HSM)
Measurement	
Temperature range	–40 to +500°C
Set-up	
Menu commands	Level, span Auto adjust continuous/manual/semi-automatic Zoom Palette Start/stop recording Store image Playback/recall image
Set-up commands	1 programmable button, local adaptation of units, language, date and time formats
Web interface	Admin camera setup and viewing IR images
Storage of images	
Image storage type	Removable SD or SDHC Memory Card, two card slots
Image storage capacity	> 1200 images (JPEG) with post process capability per GB on memory card
Image storage mode	IR/visual images Visual image can automatically be associated with corresponding IR image
Periodic image storage	Every 10 seconds up to 24 hours
File formats	Standard JPEG, 14 bit measurement data included
GPS	Location data automatically added to every image from built-in GPS
Video recording and streaming	
Non radiometric IR-video recording	MPEG4/H.264 (up to 60 minutes/clip) to memory card. Visual image can automatically be associated with corresponding recording of non radiometric IR-video.
Non radiometric IR-video streaming	RTP/H.264
Digital camera	
Built-in digital camera	3.2 Mpixel, auto focus, and two video lamps
Digital camera video recording	MPEG4/H.264 (25 minutes/clip) to memory card
Laser pointer	
Laser	Activated by dedicated button
Data communication interfaces	
USB, standard	USB Mini-B: 2.0 High Speed
Video	Digital Video Output (image)
Power system	
Battery type	Rechargeable Li Ion battery
Battery voltage	7.2 V
Battery operating time	> 2 hours at 25°C and typical use
Charging system	In camera (AC adapter or 12 V from a vehicle) or 2 bay charger
Charging time	2.5 h to 95% capacity, charging status indicated by LED's
DC operation	10.8 to 16V DC, polarity protected (proprietary protected)
Power	12,5 W typically
Start-up time	< 7 min. @ 25°C

Environmental data	
Operating temperature range	–20°C to +40°C
Storage temperature range	–30°C to +60°C
Humidity (operating and storage)	IEC 68-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) (2 cycl)
Directives	73/23EEC 89/336/EEC 2002/95/EC 2002/96/EC
EMC	EN61000-6-3 (Emission) EN61000-6-2 (Immunity) FCC 47 CFR Part 15 class B (Emission) EN 61 000-4-8, L5 EN/UL/CSA 60950-1
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Physical data	
Camera weight, incl. lens and battery	2.48 kg
Battery weight	0.24 kg
Cameras size, incl. lens (L × W × H)	306 × 169 × 161 mm
Tripod mounting	Standard, ¼"-20
Housing material	Aluminium, Magnesium
Grip material	TPE Thermoplastic Elastomers

Scope of delivery

Infrared camera
Standard Lens, 14,5° (Ge)
Shipping case
Lens cap (mounted on lens)
Lens cap strap, 2 ea.
Shoulder strap
Batteries 2 ea. (1 of the batteries inside camera)
Charger
Power supply
Power supply cord
HDMI cable
HDMI-DVI cable
USB cable
SD card
SD card adapter (connects via USB to PC)
Getting Started Guide (printed)
Manual for GF-series on CD
Video Report 1.0 with manual on CD

Заличено на основание чл. 2 от ЗЗЛД

ВЯРНО

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FLIR GF306

SF_6 Optical Gas Imaging Camera

The FLIR GF306 is an optical gas imaging camera that visualizes and pinpoints SF_6 and other gas emissions without the need to shut down operations. This portable, non-contact system allows you to quickly scan wide areas for leaks, so you can begin repairs sooner.

Sulfur Hexafluoride (SF_6) is used in the electric power industry as an insulator and quenching medium for gas-insulated substations and circuit breakers. These facilities have thousands of connections and fittings that need regular inspection, but more than 80% of a gas leaks occur in less than 1% of those components. As a result, crews spend more than 99% of their time inspecting safe, non-leaking parts.

The FLIR GF306 reduces revenue loss by detecting gas leaks efficiently, at a safe distance away from high-voltage areas.

Visible vs. OGI image of SF_6 leak

SF_6 leaking from the bushing of a gas circuit breaker

Ammonia (NH_3) gas escaping from pipes

Visualize SF_6 and Many Other Gases

Invisible gases look like smoke through the lens of the GF306, making even the smallest emissions easy to see. Unlike a traditional "sniffer", the camera allows you to survey large areas quickly and effectively and see into spaces that are difficult to reach with non-contact measurement tools. The GF306 is capable of detecting not only SF_6, but several other gases including Anhydrous Ammonia (NH_3), and Ethylene (C_2H_4).

Optical Gas Imaging and Thermography in One

The GF306 accurately measures temperatures up to 500°C as well as detects gas. Integrate this camera into your facility's predictive maintenance program for benefits beyond leak detection.

Meet EPA Regulations

One pound of SF_6 has the same global warming impact of 24,000 pounds of CO_2. It has an atmospheric lifespan of 3,200 years, so even small amounts of SF_6 can have a significant impact on global climate change.

The US Environmental Protection Agency includes optical gas imaging as an accepted leak detection technique in its Greenhouse Gas Reporting Rule.

Заличено на основание чл. 2 от ЗЗЛД

ОРИГИНАЛА

Specifications

Model	GF306
Detector Type	Focal plane array, cooled QWIP
Spectral Range	10.3 – 10.7 µm
Resolution	320 x 240 pixels
Detector Pitch	30 µm
NETD/Thermal Sensitivity	< 15 mK @ +30°C (+86°F)
Sensor Cooling	Stirling Microcooler (FLIR MC-3)
Electronics / Imaging	
Image Modes	IR image, visual image, High Sensitivity Mode (HSM)
Frame Rate (Full Window)	60 Hz
Dynamic Range	14-bit
Video Recording / Streaming	Real-time non-radiometric recording: MPEG4/H.264 (up to 60 min./clip) to memory card Real-time non-radiometric streaming: RTP/MPEG4
Visual Video	MPEG4 (25 min./clip) to memory card
Visual Image	3.2 MP from integrated visible camera
GPS	Location data stored with every image
Camera Control	Remote camera control via USB
Measurement	
Temperature range	–40°C to +500°C (–40°F to +932°F)
Accuracy	±1°C (±1.8°F) for temperature range (0°C to +100°C, +32°F to +212°F) or ±2% of reading for temperature range (>+100°C, >+212°F)
File Storage	
Storage Media	Removable SD or SDHC memory card; two card slots
Image Storage Capacity	> 1200 images (JPEG) with post-process capability per GB on memory card
Optics	
Camera f/number	f/1.5
Available Fixed Lenses	14.5° (38 mm), 24° (23 mm)
Focus	Automatic (one touch) or manual (electric or on the lens)
Image Presentation	
On-Camera Display	Built-in widescreen, 4.3 in. LCD, 800 x 480 pixels
Automatic Gain Control	Continuous/manual, linear, histogram
Menu Commands	Level/span, auto adjust continuous/manual/semi-automatic, zoom, palette, start/stop recording, store image, playback/recall image
Color palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Zoom	1-8x continuous, digital zoom
General	
Operating Temperature Range	–20°C to +40°C (–4°F to +104°F)
Storage Temperature Range	–30°C to +60°C (–22°F to +140°F)
Encapsulation	IP 54 (IEC 60529)
Bump / Vibration	25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6)
Power	AC adapter 90-260 VAC, 50/60 Hz or 12 V from a vehicle
Battery System	Rechargeable Li-ion battery
Weight w/ Battery & Lens	2.48 kg (5.47 lb.)
Size (L x W x H) w/ Lens	305 x 169 x 161 mm (12.0 x 6.7 x 6.3 in.)
Mounting	UNC 1/4"-20

The gases FLIR's GF306 can detect include:

- Sulphur Hexafluoride
- Anhydrous Ammonia
- Ethylene
- Ethyl Cyanoacrylate ("Superglue")
- Chlorine Dioxide
- Acetic Acid
- FREON-12
- Methyl Ethyl Ketone (MEK)

Заличено на основание чл. 2 от ЗЗЛД

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NASDAQ: FLIR

ІНАЛА

FLIR | The World's Sixth Sense

AUTHORIZATION LETTER

Date: November 5, 2019

This is to confirm that the following company:

ACM Diagnostics Ltd

Located at:

7 Stefan Karadzha str. App.11,

Sofia 1000 Bulgaria

Is an authorized non-exclusive distributor for the sales and marketing of;

Optical Gas Imaging
Sales and service in Bulgaria

This authorization is valid until 31/12/2019 unless revoked in writing before that date.

This document is just describing the status and is not serving as a legal document. Instead the actual terms are defined and agreed in a FLIR non-exclusive distribution contract which is valid for a timeframe of one year and then annually reviewed and where applicable renewed.

Sincerely,

Signature: Rickard Lindvall

Email: rickard.lindvall@flir.se

Заличено на основание чл. 2 от ЗЗЛД

Rickard Lindvall
General Manager Instruments

ВЯРНО