

TECNOVIDEO

CCTV SYSTEMS AND ACCESSORIES

EXF129TGD1

GAS DETECTION/FLAME DETECTION THERMAL CAMERA

TVTherm

- GAS DETECTION/GAS QUANTIFICATION CAMERA
- DETECTS **SF6, METHANOL, REFRIGERANT GASSES, AMMONIA**
- FLAME DETECTION
- INTELLIGENT THERMOGRAPHY
- DETECTION OF PEOPLE ENTERING RISKY AREAS
- ATEX/IECEX/UKCA/INMETRO CERTIFIED FOR HAZARDOUS LOCATIONS
- WEATHERPROOF STANDARD IP66/67
- AISI316L STAINLESS STEEL CONSTRUCTION
- 1CH LICENSE TVTHERM SOFTWARE



EXF129TGD1 is an innovative system that, combined with TVTherm software, provides continuous and automatic monitoring of industrial areas within environments with hazardous risks.

It's a hardware and software solution, based on infrared thermography and real-time computer image processing.

EXF129TGD1 is a high sensitivity uncooled thermal camera that delivers best quality thermal images, and TVTherm is a very advanced software with innovative algorithms that provides intelligent solutions.

Main features:



Gas Detection and Quantification: capability to immediately detect, localize and visualize gas leaks of SF6, METHANOL, REFRIGERANTS, AMMONIA and other gasses. It can provide also a quantity estimation. The detection area is adjustable based on camera position and distance



Flame Detection: detection of a fire point, with immediate localization and visualization. Capable of detection over large areas. High immunity to false alarms



Intelligent Thermography: high accuracy temperature measurement and detection of hot/cold spots



Surveillance: detection of people entering into dangerous areas or crossing virtual lines



Tank Leveling: monitoring and quantity estimation of the liquid level in storage tanks



Main TVTherm functionalities:

- **24/7 Monitoring:** automatically alerts of any event
- **Logs:** all events are recorded together with event videos
- **Reporting:** event alarms are sent to the Control Center. Several Security and Industrial protocols are supported



TECHNICAL SPECIFICATIONS

GENERAL & MECHANICAL

Dimensions	See drawings next page
Operating Temperature	-20° +55°C (-4°F +131°F)
Window	Germanium, Hard Carbon coated
Construction	AlSi316L Stainless Steel
Finish	Electro-polished
Mounting	See drawings next page
Cable entries	2x M25x1,5 cable entries
Weight	Unit: 16Kg / Package: 17Kg

ELECTRICAL

Thermostatically controlled heater	T[°C] ON = 12 ± 4°C, T[°C] OFF = 20 ± 3°C
Available voltages	24VAC, 230VAC (+/-10%)
Max power consumption	25W

VIDEO/CAMERA

Sensor	Uncooled FPA 640 x 480 array, 17µm pitch
Compression	Uncompressed video
Frame Rate	9/25Hz
Sensitivity	NETD < 22mK @ +30°C
Accuracy	± 1°C (from 0°C to 60°C)
Lens	Tele 12°x9° (50mm) Medium 18°x13° (35mm) Wide 31°x23° (20mm)

NETWORK

Interface	Ethernet 1000 Base-TX/FX
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CERTIFICATIONS

Ingress Protection Rating	EN60529 (IP66/IP67) Ⓜ II 2 G Ex db op pr IIC T6 Gb -40°C ≤ Tamb ≤ +60°C Ⓜ II 2 D Ex tb IIIC T85°C Db -40°C ≤ Tamb ≤ +60°C Ⓜ II 2 G Ex db op pr IIB T5 Gb -40°C ≤ Tamb ≤ +75°C Ⓜ II 2 D Ex tb IIIC T100°C Db -40°C ≤ Tamb ≤ +75°C
ATEX/UKEX Standards	EN60079-0; EN60079-1; EN60079-28; EN60079-31
IECEX Standards	IEC60079-0; IEC60079-1; IEC60079-28; IEC60079-31
INMETRO	ABNT NBR IEC 60079-0; ABNT NBR IEC 60079-1; ABNT NBR IEC 60079-28; ABNT NBR IEC 60079-31
EMC	EN50130-4; EN55035 ; EN/IEC61000-6-2; EN/IEC61000-6-4
LVD	EN 60950-1 ; EN 60950-22
RoHS	2011/65/EU + 2015/863/EU (RoHS 3)
WEEE	2012/19/EU

MODELS

EXF129TGD1.V.20/24	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 20mm lens. 24VAC. License 1ch TVTherm software.
EXF129TGD1.V.35/24	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 35mm lens. 24VAC. License 1ch TVTherm software.
EXF129TGD1.V.50/24	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 50mm lens. 24VAC. License 1ch TVTherm software.
EXF129TGD1.V.20/230	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 20mm lens. 230VAC. License 1ch TVTherm software.
EXF129TGD1.V.35/230	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 35mm lens. 230VAC. License 1ch TVTherm software.
EXF129TGD1.V.50/230	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 50mm lens. 230VAC. License 1ch TVTherm software.
EXF129TGD1.V.20FO/24	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 20mm lens, SM Gigabit fiber media converter. 24VAC. License 1ch TVTherm software.
EXF129TGD1.V.35FO/24	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 35mm lens, SM Gigabit fiber media converter. 24VAC. License 1ch TVTherm software.
EXF129TGD1.V.50FO/24	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 50mm lens, SM Gigabit fiber media converter. 24VAC. License 1ch TVTherm software.
EXF129TGD1.V.20FO/230	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 20mm lens, SM Gigabit fiber media converter. 230VAC. License 1ch TVTherm software.
EXF129TGD1.V.35FO/230	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 35mm lens, SM Gigabit fiber media converter. 230VAC. License 1ch TVTherm software.
EXF129TGD1.V.50FO/230	Explosionproof Gas Detection/Gas Quantification thermal camera, IP66/67, 640x480, 9Hz, 50mm lens, SM Gigabit fiber media converter. 230VAC. License 1ch TVTherm software.

25Hz versions available upon request (add "-H" suffix)

PRE-ASSEMBLED CONDUIT/CABLE TAILS

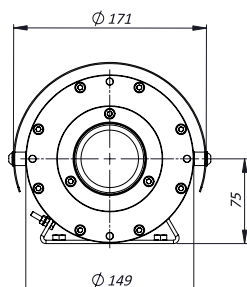
EXACCTF3-A	3 meters armored composite cable tail (power, Ethernet, data) with 2x M25 barrier nickel plated brass glands
EXACCTF3-C	3 meters armored composite cable tail (power, data, fiber optic) with 2x M25 barrier nickel plated brass glands. Fiber termination: SC
EXACCTF5-A	5 meters armored composite cable tail (power, Ethernet, data) with 2x M25 barrier nickel plated brass glands
EXACCTF5-C	5 meters armored composite cable tail (power, data, fiber optic) with 2x M25 barrier nickel plated brass glands. Fiber termination: SC
EXACCTF10-A	10 meters armored composite cable tail (power, Ethernet, data) with 2x M25 barrier nickel plated brass glands
EXACCTF10-C	10 meters armored composite cable tail (power, data, fiber optic) with 2x M25 barrier nickel plated brass glands. Fiber termination: SC

MOUNTING ACCESSORIES

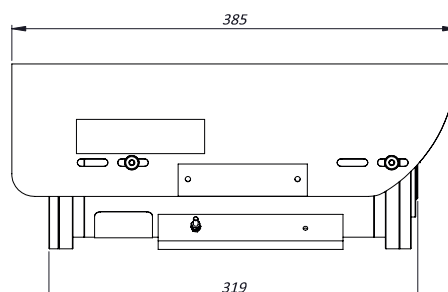
SSBK-M	AlSi316L wall mounting bracket
SSPM-M	AlSi316L pole mount adapter for SSBK-M
SSPTM-M	AlSi316L top pole mount adapter

DIMENSIONS

FRONT VIEW



SIDE VIEW



MOUNTING PATTERN

