

TECNOVIDEO

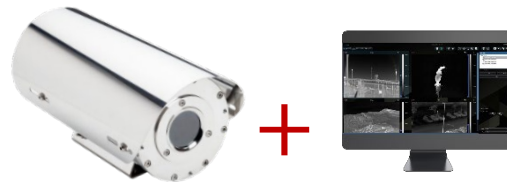
CCTV SYSTEMS AND ACCESSORIES

EXF129TFM1

FLARE MONITORING THERMAL CAMERA

TVTherm

- FLARE MONITORING CAMERA
- ATEX/IECEX/UKCA/INMETRO CERTIFIED FOR HAZARDOUS LOCATIONS
- WEATHERPROOF STANDARD IP66/67
- AISI316L STAINLESS STEEL CONSTRUCTION
- 1CH LICENSE TVTHERM SOFTWARE

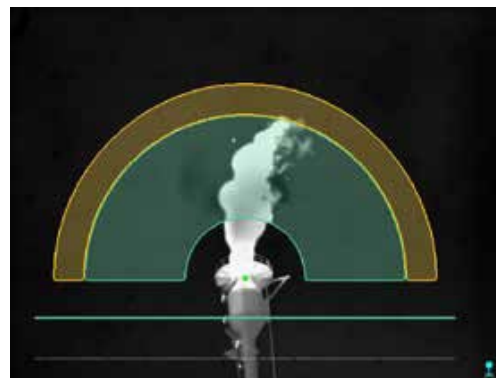


EX129TFM1 is an innovative system that, combined with TVTherm software, provides continuous and automatic monitoring of industrial areas within environments with hazardous risks. It's a hardware and software solution, based on infrared thermography and real-time computer image processing. EX129TFM1 is a high sensitivity uncooled thermal camera that delivers quality thermal images, and TVTherm is a very advanced software with innovative algorithms that provides intelligent solutions.

Main features:

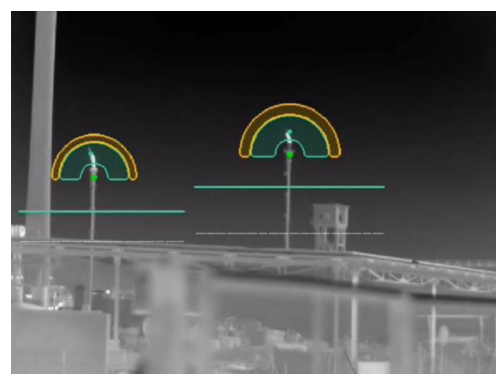
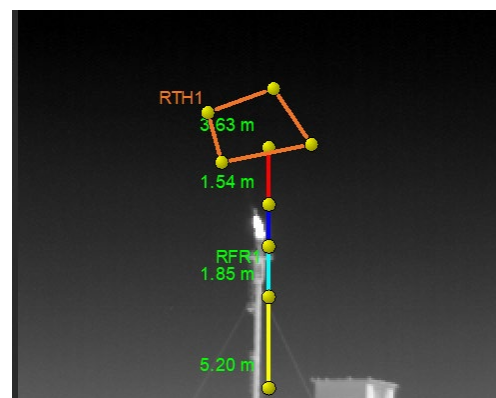


Flare Monitoring: algorithm to monitor the flare for best performance of the process. Easy to configure and fine tune. Detects shut-off, oversized flare and burning rain. Detection areas can be adjusted upon the flare size, camera position and distance.



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
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ELECTRICAL

Thermostatically controlled heater	T1[°C] ON = 12 ± 4°C, T1[°C] OFF = 20 ± 3°C
Available voltages	24VAC, 230VAC (+/-10%)
Max power consumption	25W

VIDEO/CAMERA

Sensor	Uncooled FPA 384 x 288 array, 17µm pitch (640 x 480 available on demand)
Compression	Uncompressed video
Frame Rate	9/25Hz
Sensitivity	NETD < 50mK @ +30°C
Accuracy	± 2°C (from 500°C to 1500°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

EXF129TFM1.Q.20/24	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 20mm lens. 24VAC. License 1ch TVTherm software.
EXF129TFM1.Q.35/24	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 35mm lens. 24VAC. License 1ch TVTherm software.
EXF129TFM1.Q.50/24	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 50mm lens. 24VAC. License 1ch TVTherm software.
EXF129TFM1.Q.20/230	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 20mm lens. 230VAC. License 1ch TVTherm software.
EXF129TFM1.Q.35/230	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 35mm lens. 230VAC. License 1ch TVTherm software.
EXF129TFM1.Q.50/230	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 50mm lens. 230VAC. License 1ch TVTherm software.
EXF129TFM1.Q.20FO/24	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 20mm lens, SM Gigabit fiber media converter. 24VAC. License 1ch TVTherm software.
EXF129TFM1.Q.35FO/24	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 35mm lens, SM Gigabit fiber media converter. 24VAC. License 1ch TVTherm software.
EXF129TFM1.Q.50FO/24	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 50mm lens, SM Gigabit fiber media converter. 24VAC. License 1ch TVTherm software.
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EXF129TFM1.Q.35FO/230	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 35mm lens, SM Gigabit fiber media converter. 230VAC. License 1ch TVTherm software.
EXF129TFM1.Q.50FO/230	Explosionproof Flare Monitoring thermal camera, IP66/67, 384x288, 9Hz, 50mm lens, SM Gigabit fiber media converter. 230VAC. License 1ch TVTherm software.

25Hz versions available upon request (add "H" suffix)
640 x 480 pixels available upon request (suffix "V" instead of "Q")

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

