

# TC7000

Tough, safe and accurate, **TC7000** is the **thermal imaging camera** of choice for oil, gas mining, marine and dust environments.



## FEATURES

ATEX/IECEX Certified for Zone 1, 2, 21, 22 & M2 explosive areas

No waiting for hot work permits with intrinsically safe design

Built-in RFID tag reader for use with the CorDEX Intelligent IR Windows

Find the smallest defects with the high resolution 320 x 240 IR detector

**The TC7000** - Thermal imaging is a proven tool for predictive maintenance; however thermography in hazardous (explosive) areas has not been easily accessible due to certification restrictions.

Being the only certified intrinsically safe fully radiometric thermal imaging camera, the TC7000 means that this is now possible, removing the need to obtain hot work permits for Zone 1, 2, 21, 22 and M2 explosive areas.

Tough, safe and accurate, TC7000 is the thermal imaging camera of choice for oil, gas, mining, marine and dust environments where safety cannot be compromised. The TC7000 now allows you to image

and measure refractory lining in crackers and heaters, missing or damaged pipe insulation, steam traps, motors, bearings, gearboxes, shaft misalignment, trace heating, flares, tank levels, condenser fins, heat exchangers, pumps, pipe and valve leakage, poor lubrication and safe area electrical switchgear.

Using the built-in RFID Scanner and CorDEX CONNECT™ Software you can now take predictive maintenance to a whole new level, whilst helping to decrease and eliminate downtime in known trouble areas. With CorDEX CONNECT™ you can simply manage your CorDEX equipment, edit images, analyse data, schedule maintenance and create reports.



Swivel the lens to minimise screen reflections and comfortably access high and low areas of interest.



See hot spots easily with the clear and bright 3.2" Backlit Display.



Download images and data through the USB connection to CorDEX CONNECT™ reporting and predictive maintenance software.

## FEATURED PRODUCT

SMART IR Window Series  
IW2000/IW3000/IW4000



CorDEX reserve the right to make changes to the instrument at anytime and without notice.

# PRODUCT OVERVIEW

## Certificate Information

ATEX / IECEx Certificate No	TRAC12ATEX0037X / IECEx TRC 12.0019X
ATEX / IECEx Certificate Types	<ul style="list-style-type: none"> <li>Ex ib IIC T4 Gb Tamb -10°C to +40°C (Vapor)</li> <li>Ex ib IIIC T200°C Db Tamb -10°C to +40°C (Dust)</li> <li>Ex ib I Mb (Mining)</li> </ul>

## Temperature Information

Measurement Range	-4°F to 1112°F (-20°C to +600°C)
Accuracy	± 2°C or 2% of reading

## Imaging

Image Frequency	9Hz
Detector	320 x 240 uncooled microbolometer
Thermal Sensitivity/NETD	50mK
Spectral Range	8µm to 14µm
Field of View (FOV)	25° x 20.5°
Spatial resolution (IFOV)	1.38 mrad
Minimum focus distance	≈ 4" (10cm)
Lens	F 1.2

## Image Capture

File Storage	8GB
File Formats	CDX (Radiometric) JPEG (Non-radiometric)
Voice Annotation	YES
RFID Tag Reader	<ul style="list-style-type: none"> <li>Operates with 13.56MHz passive tags</li> <li>Detection range up to 5cm (1.9in)</li> <li>Supports ISO/IEC15693-2, ISO/IEC18000-3 tag formats</li> </ul>

## General

Operating Temperature	-4°F to 104°F (-20°C to +40°C)
Storage Temperature	-40°F to +158°F (-40°C to +70°C)
Display	3.2" Backlit LCD
Software	CorDEX CONNECT (Included)
Batteries	Rechargeable Lithium-ion

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