ICI | INFRARED CAMERAS INC

CRITICAL MONITORING AT A DISTANCE

PREDICTIVE MAINTENANCE MADE EASY

Our NEMA 4X fixed mounted thermal management systems are designed to provide remote detection capabilities at safe distances. Since its inception, the stainless steel enclosed devices have been utilized to monitor critical equipment, flares, flare pilots, electrical connections, and tank levels in real-time. Perfect for finding and locating critical failures as well as abnormal temperatures in pipelines and storage facilities.


FMX 400 Thermal Management System
camera not shown to scale

ENVIRONMENTALLY PROTECTED

Our thermal device management systems include NEMA 4X rated IP66 stainless steel enclosures to protect against dirt, dust, and other particulates. They have been installed aboard ships as well as oil platforms and withstand high pressure jets as well as salt water exposure.
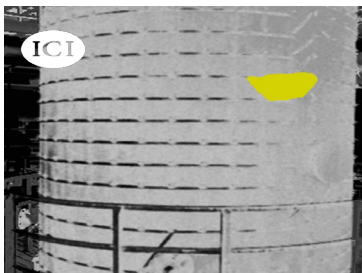
ALARMING FUNCTIONS

Pair the internal infrared device with our IR Flash Pro software and enable the built-in alarming features to receive notifications when thresholds are exceeded. Reduces response time in critical situations. Collect quantitative temperature data for in-depth thermal analysis of hot spots and detect changes over time in order to locate failures before they happen.
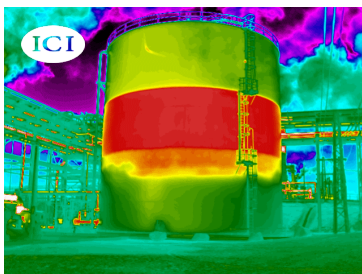
REAL-TIME THERMAL IMAGING

Provides quality resolution thermal images streamed in real-time via Ethernet connection. Multiple color palettes are available to enhance viewing and easily find hot spots. Perfect for industrial and petrochemical monitoring.

FMX 400 P-SERIES
THERMAL MANAGEMENT SYSTEM

Industry

The FMX 400 P-Series is a 384 x 288 imager with unmatched sensitivity and an accuracy of ± 2 °C (± 3.6 °F) or ± 2%. It provides real-time thermal imaging of temperatures between -20 °C to 120 °C (-4 °F to 248 °F). Our FMX 400 is designed for fixed mounted applications. Integrate it with our stainless steel, explosion proof housing for imaging flares or hard to access areas. The FMX 400 has IP 54 protection and includes IR Flash Pro software for thermal analysis.

Features

- Unmatched image sensitivity
- Radiometric data streaming
- 10 Color palettes
- Alarms trigger
- Spot/Area/Isotherm
- Small size
- Light weight
- Low power, < 3 W

Applications

- Process control monitoring
- Industrial vision systems
- Predictive maintenance
- Reliability engineering
- Electrical/electronics monitoring
- Scientific research
- Building automation
- Security monitoring

Specifications

- **Pixel Resolution:** 384 x 288
- **Accuracy:** ± 2 °C (± 3.6 °F) or ± 2%
- **Temperature Range:** -20 °C to 120 °C (-4 °F to 248 °F)
- **Operation Range:** -10 °C to 60 °C (14 °F to 140 °F)
- **Storage Range:** -20 °C to 65°C (-4 °F to 149 °F)
- **Detector Array:** UFPA
- **Pixel Pitch:** 17 µm
- **FOV:** 47° x 35.6°
- **Focus:** electronic
- **Measurement Distance:** lens dependent
- **Spectral Band:** 8 µm - 14 µm
- **Thermal Sensitivity (NETD):**
  < (40 mK) 0.04 °C at 30 °C (86 °F)
- **Frame Rate:** 50 Hz NTSC/PAL
- **Dynamic Range:** 14-bit
- **Humidity:** 5% to 95% non-condensing
- **Pixel Operability:** > 99%
- **Shock/Vibration:** 30 G/4.3 G
- **Dimensions:**
  119 mm x 55 mm x 55 mm (L x W x H +/- 0.5 mm)
  (4.69" x 2.17" x 2.17" (L x W x H ± 0.02"))
- **Power:** DC 110V 10 - 36, < 3 W
- **Weight (without lens):** < 370 g (13.05 oz)
- **Interface:** RJ-45 Ethernet
- **Video:** raw data
- **Emissivity Correction:** 0.01 to 1.0
- **Protection:** IP 54
- Internal non-uniformity correction (NUC)
- 1/4"-20 tripod support

Options

- NEMA 4X explosion proof housing
- Standard tripod

FMX 400 P-Series