EUROTEC

People • Technology • Solutions
HVAC • Refrigeration • Electrical • Measurement

37,3°C

FEVER MEASUREMENT AREA

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FEVER SCREENING SYSTEMS

when temperature matters

↑ 37,6°C

37,6°C

optris
infrared measurements

Viral epidemics like SARS, MERS, swine flu or the current **coronavirus / COVID-19** created a worldwide demand for infrared cameras able to screen for a fever condition in humans. Optris offers an excellent solution for this.

The **T010** models of **Xi 400** and **Pi 450i** are the dedicated cameras for this application, delivering up to 40 mK thermal sensitivity and making it easy to discern elevated body temperatures.

As employees return to work after virus related lockdowns have been lifted, it is critical for companies to ensure the health of this returning work force is not compromised by workers who may contract a virus outside the facility.

The Fever screening system can be used in different variants and application areas - so **individual scans** of single persons or **crowd based screening** of larger groups of people can be implemented.

The installation of the whole system including the **reference radiator** and **PIX Connect software**, which comes with a predefined fever screening layout, is very easy. It can also be re-located if necessary and set up in minimum time.

The system works **discreetly**. The software singles out the people whose skin temperature exceeds the predefined value.

The **visual alarm** quickly identifies subjects who exhibit temperature increases from the normal population allowing security staff to validate internal temperature and discreetly examine the subject for additional symptoms.

Thermal images with temperature measurements can be stored whenever a temperature exceeds the pre-set threshold.

Optris IR cameras and Ambient reference source

BR 20AR

PI 450i T010

Xi 400 T010

↑ 38,4°C

Key features of the optris Fever Screening Systems

- Screening of employees and visitors with elevated skin temperatures.

- Easy installation and operation of the inspection system.

- Alarm signal when skin temperature reaches predefined alarm value.

- Thermal Images of fever suspects can be stored automatically.

- Extensive software inclusive, runs on a standard PC.

- 382 x 288 pixel resolution and 80 mK (Xi 400) or 40 mK (PI 450i) thermal sensitivity (NETD).

- PI 450i T010 with ambient referencing source BR 20AR for an absolute measurement accuracy of +/- 0.5°C.

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The two main approaches

1. Crowd Based Screening

Xi 400

The IR camera can monitor a crowd of people at once or sequentially. Assuming that the majority of the measured maximum head temperature values are coming from healthy individuals, those with an elevated body temperature can be easily detected.

Scope of supply:
Process imager Xi 400, Pre-configured Microsoft Surface Pro Tablet, USB cable, software package Optris PIX Connect.

2. Individual Screening

Waterproof Housing for PI 450i

Visual Alarm

This method is mainly used at control gates or where crowd screening is not possible. From a closer distance you can measure exactly the temperature of the Medial canthus (tear duct) which provides the strongest correlation between outside skin temperature and core body temperature.

This method can also detect lower fever grades.

Recommendations:
PI 450i T010 with 29° optics@ 1 m distance or
PI 450i T010 with 13° optics @ 1.5 ... 2 m distance
(MFOV should be 4 mm or less)

Fields of Application

Hospitals

Supermarkets & Malls

Offices

Schools/Universities
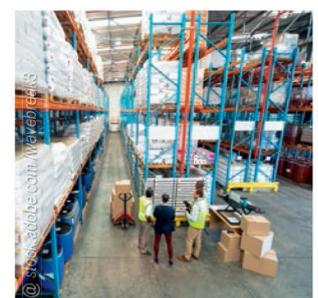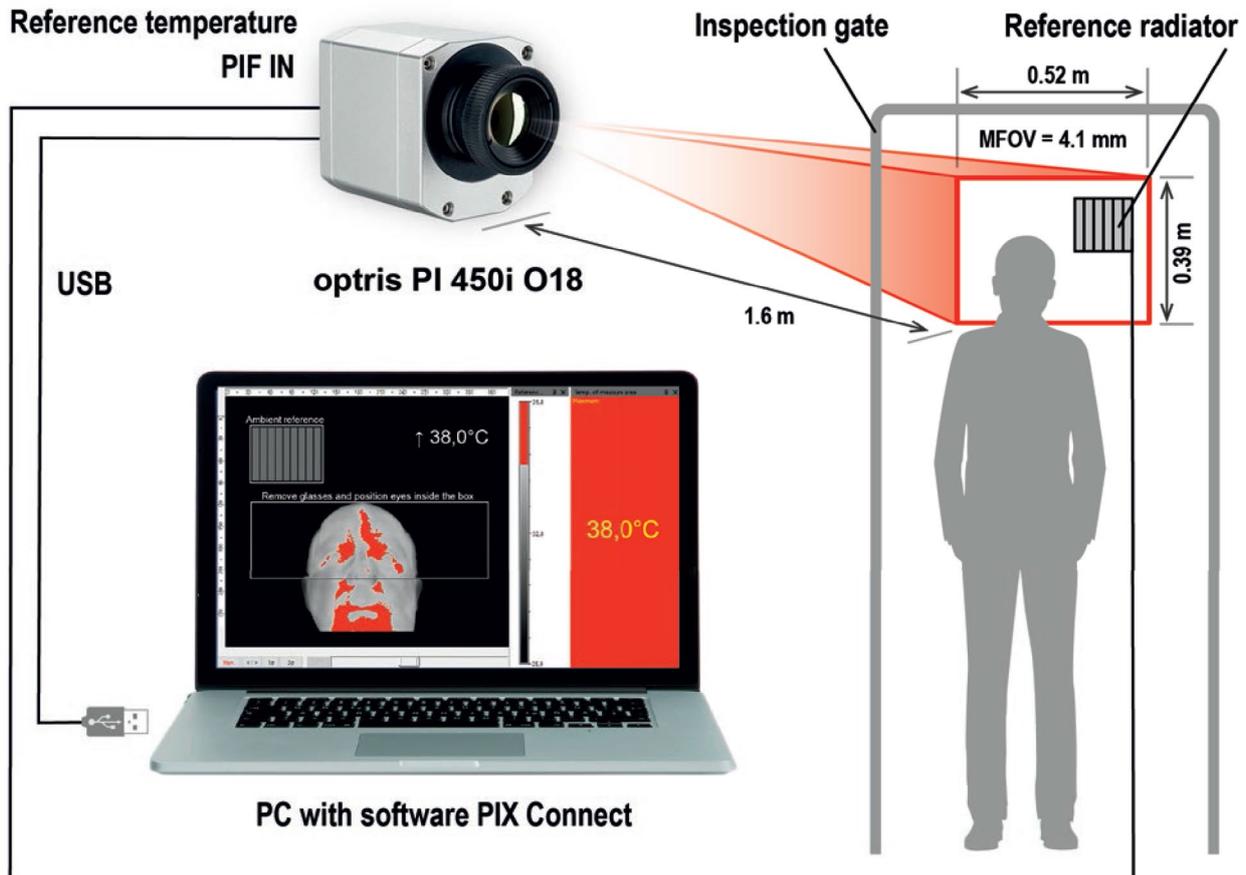

Airports

Stations

Lobbies/Foyers

Warehouses

The Optris **PI 450i T010** infrared camera can be combined with the dedicated ambient referencing source **BR 20AR** which is equipped with a digital temperature sensor with **+/- 0.1 °C accuracy.** The reference source has to be positioned in the scene proximate to the subject to be scanned. The high accurate reference signal is integrated into the **PIX Connect** analysis software and gives a system **accuracy of +/- 0.5 °C**.

Eurotec Ltd are proud to be a New Zealand distributor of German non-contact temperature measurement manufacturer Optris.

Optris was founded in 2003 and has since established itself as one of the leading innovative manufacturers of non-contact temperature measurement devices. Optris founder and General Manager Dr.-Ing. Ulrich Kienitz has over 30 years of experience in the field of infrared temperature measurement. The product portfolio comprises of stationary infrared thermometers and online infrared cameras as well as accompanying accessories and software for industrial applications and research & development.

"German engineering" - thanks to an extensive know-how and innovative concepts, Optris' experienced engineers and physicists continuously inspire new product developments and outstanding solutions. Optris develop and produce in Germany to ensure the highest standard in quality as a key component of their company policy.

Contact Eurotec Ltd today and speak to one of our sales engineers for more information.

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