

# Fire Detection System



# • Infrared camera PYROVIEW 380L or PYROVIEW 380L compact

- Measure range from -20 °C to 500 °C
- Wavelength from 8  $\mu$ m to 14  $\mu$ m
- 384  $\times$  288 elements
- Max. frame rate 50 Hz
- Industrial housing IP 65 or weatherproof housing
- Digital data transmission via Fast Ethernet, optionally FO
- Pan-tilt head
- PC with TFT monitor
- I/O system and control panel
- Software PYROSOFT FDS



... is a reliable system for surveillance and recognition of spontaneous fires inside bunkers or free air dumps of waste or combustible materials like paper or charcoal among many others.

Since the dumped materials are mostly inflammable the probability of spontaneous combustions is high with disastrous effects for man and environment. Assurances recommend the usage of fire early warning systems based on infrared cameras.

The well introduced high performance infrared camera PYROVIEW 380L combined with the powerful WINDOWS®software PYROSOFT FDS for the analysing of thermographic images allows an early recognition and fire prevention.



The infrared camera PYROVEW 380L mounted to a pan-tilt head monitors automatically the user defined area to be observed and quantifies continuously the temperature distribution on the surface.

The software PYROSOFT FDS checks the temperatures inside the regions of interest (ROI). An alarm will be raised in case of exceeding the predefined temperature limit and the current infrared image is saved.

Alarms and the system status are displayed on the monitor and the control panel. External equipment for alerting and firefighting can be controlled via the flexible I/O system.



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PYROVIEW/PYROSOFT FDS







Technical details are subject to change without notice. February 2009.



# **Appliance and Setup**

The software PYROSOFT FDS is easy to handle and offers various possibilities to setup the whole functionality:

- Displaying of status information
- Displaying of the maximal temperature inside the image
- Definition of ROIs (region of interest)
- Overview images and state of single sectors
- Cyclic changeover for up to 4 cameras
- Current image of the camera setting off an alarm
- Free positioning of the pan-tilt head in manual operation mode

## **Fire Detection**

The infrared image is displayed in a pseudo color image mode gray-scaled; the brighter the color, the higher the temperature. In case of fire areas exceeding the temperature limits become red colored. The operator recognizes the source of fire immediately and can start fire fighting actions.

The infrared image on the left side shows a initial fire in a paper stock. Because of the early recognition and warning the fire fighting had been started instantly with a high efficiency – ecological and material damages had been avoided.

### References

## • Moritz J. Weig GmbH & Co KG Mayen, Germany

A fire detection system monitors a paper stock permanently. Updated information are displayed on a screen for the operator.

Commune Bergen
Bergen, Norway

The city Bergen uses a fire detection system connected to the local fire department to protect historical wood houses from fire.



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