

The Thermal imaging camera TIC – PE10 is an equipment designed to be used in hard environmental conditions in mining companies.

The device allows constant analysis of the surrounding, temperature anomaly detection, which, when diagnosed too late, can cause interruptions of production.

Implementation

- controlling the heating of equipment, ventilation equipment,
- controlling the heating of the tape and components for conveyors when transporting excavated material,
- controlling machines (to detect overheating of components, bearings),
- thermal diagnostics of electric devices (such as transformers, cables, motors, pumps)
- searching for potential fire ignitions,
- detecting hot spots
- detecting anomalies of temperature (cold and warm places in the environment)
- helping rescuers involved in rescue operations.

Characteristics

- portable version of infrared camera built for use in difficult environments found in mines,
- the camera casing is made of plastic with high resistance to mechanical shock,
- the camera has a special sputtered layer on the optics window which protects it from scratches, e.g. by dust,
- infrared resolution 80x80, interpolated up to 240x240
- thermal sensitivity $\leq 100\text{mK}$
- infrared field of view 23.3o
- temperature measurement -20 ... +350 ° C
- long battery life (8 hours)
- operating temperature range -10 ... + 40 ° C,
- compact dimensions of 208x115x60mm,
- low weight 0.55kg,
- increased degree of casing protection IP67,
- light, handy, and easy to use,
- stores in memory infrared photos of observed scenes,
- stores in memory images of observed scenes in visible light,
- allows to determine the temperature of the object viewed in any of its points
- dedicated for services in ventilation, emergency, supervision in the mine and for less advanced users,
- dedicated communication software and camera control as well as viewing and analyzing images.

