

THERMAL IMAGERS

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There is no need to remind of the importance of a technical process in our lives. Humanity has already accustomed to the modern devices and equipment and we cannot imagine how we lived without it. The development of technology finds applications in life, medicine, education, industry and business. But one has to remember that each device may have both positive and negative impact on human health.

Energy management has succeeded a lot recently. It offers new trends and possibilities in energy consumption. The use of thermal imagers is widely discussed today.

The thermal imager is a device for monitoring the temperature distribution of the surface under study. This distribution is typically shown in the display in color. The red color is used for high temperature zones and the yellow one refers to areas of low temperatures. One should distinguish between observation and measurement types of thermal imagers.

The first just make the image in infrared light visible in any color scale. The measurement thermal imagers, in addition, are set to a digital signal for each pixel which corresponds particular temperature, resulting in a pattern of temperature distribution. Modern thermal imagers are widely used in medicine. It is known that the disease of the body raises its temperature. The harmful radiation is not evolved.

In the 1980s, methods for the use of thermal imagers were developed for the diagnosis of various diseases. Those imagers were used in various health care settings, in neurosurgery in particular.

Since 2008-2009 imagers have also started to be actively used for allocation of people infected with influenza virus if they stay in the crowd. They are very convenient and safe. In addition, thermal imagers are very compact.

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