

Imaging in the Visible and Infrared Bands

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The infrared band is often used in conjunction with visual imaging. This article considers introducing its applications in light microscopy, astronomy, remote sensing, industry, and law enforcement.

The first application is light microscope, and its areas are too numerous to detail. Another major area of visual processing is remote sensing, which usually includes several bands in the visual and infrared regions of the spectrum. This article gives a table to show a satellite which function is to obtain and transmit images of the Earth from space with the purpose of monitoring environmental conditions or predicting and observing weather.

A major area of imaging in the visual spectrum is in automated visual inspecting of manufactured goods. A typical image processing task is to inspect them for missing part like looking for missing pills. Detecting anomalies like these is a major purpose of industrial inspection. The last illustration of image processing in the visual spectrum is a thumb print. They are processed by computer, with the propose to enhance them or to find features that can be searched automatically of a database for potential matches.