

Color measurement of self-luminous objects with the SPECTRO-3-FIO

With the **SPECTRO-3-FIO color sensor** there now is a system that ideally can measure different light sources similar to human visual perception. This is achieved by the "true-color detector" that is integrated in the sensor, and by corresponding software evaluation algorithms. The so-called L^*, u^*, v^* value provides information about the brightness and about the red/green and yellow/blue color value of the light source. An extensive range of optical fibres and attachment optics units allows optimal matching of the sensor system to the respective light source. The required dynamic range is achieved by way of eight software-selectable gain stages. Optical attenuation filters are available for super-bright light sources.

Up to 31 light sources can be stored (taught) in the SPECTRO-3-FIO, the tolerance ranges for the individual taught color states can be preset with the software. The sensor provides the information about the detected color state by way of five digital outputs.

