



RGB Color Sensor PR0068

The „RGB-Color Sensor PR0068“ module is used for high-precision measurement of color. The color and intensity values from 3 measurement points are acquired and evaluated synchronously. The module delivers relative results in form of raw sensor values as well as absolute color values x, y, z und Y (Luminance) according to CIE1931. In addition internal algorithms can be activated that provide a noticeable optimization of the absolute accuracy. Each measurement point can be independently calibrated to defined references. The main focus of this module is the high synchronism of color and luminance outputs of the 3 measurement points.



Various types of light guides and optics can be adapted depending on the application. Thereby products for adverse environmental conditions are available. Special solutions can be realized on customer's request.



Technical data:

- Wavelength 400 - 690nm
- Output color values in x, y, z, Y
- Absolute accuracy x, y, z: < 0,047 with color correction
- Average value 0,016 with color correction
- Luminance Y: < 6,1, average value < 1,6
- external 3-channel light source
- Dynamic > 100 db
- 14 amplification levels
- Resolution of 13 Bit per sensitivity level
- parallel registration of all color channels
- White adjustment with ref. to std. panels
- Interface RS 485 and TCP-IP
- Measurement distance in accordance to used light guides and optics : 10-40mm
- Patent DE 100 14 965 C1; EP 1 276 926 B1;

The intuitive Software Tool, included in the scope of delivery is used for commissioning.

The system disposes of a WIN32 DLL and also of an oscilloscope function for displaying of the current color values of the channels to each other. In the software tool, the input states of the current product's signals are continuously displayed.

The communication to other systems is only possible via the serial or the TCP-IP interface.



The software is compatible with WIN98/WIN4.0/WIN-XP.

Dimensions PR0068

- Length: app. 93mm
- Breadth: app. 70mm
- Height: app. 47mm

Power supply

- 24VDC +/- 5%, max. 0,5 A

Weight: app. 350g