let your mind flow

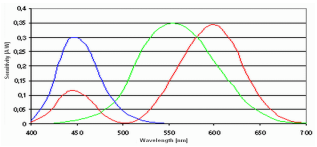
Color Sensor PR0079

The module detects the color and intensity of test objects and disposes of an internal light source. The measuring procedure is based on measurements in comparison to reference products by means of user-specific parameters. Here the differential measurement is used, whereby disturbances through environment light are automatically compensated.

Color and intensity of the test objects can be parameterized and evaluated separately. The module is optimized for high-speed processing. The internal cycle time amounts to 500us. The module possesses of a parallel (Controller) and a serial interface, which can also be used in parallel when operating.

Products from white to black can be tested without changing the gain or any other parameters.

This figure shows the spectral distribution curve of the integrated three-sector color sensor. The sensor values are enhanced in a way that a color outcome is generated in independence from the intensity.



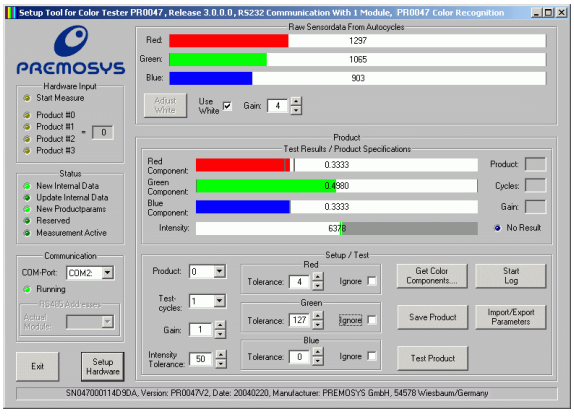
Technical data:

- Test of products for their color and intensity
- Variable interfaces I/O and serial
- internal Resolution of 13 bit, Dynamic >90 db
- Measuring resolution ΔE > 0,5
- Wavelength 400 - 700nm
- 14 amplification levels
- Parallel registration of all color conducts
- internal light source 2,5W
- White adjustment with reference to standard panels
- Measuring distance depending on utilized light guide 5-140mm

The scope of delivery comprises a comfortable intuitive software tool for the commissioning, parameterization and the statistical evaluation of measurement results. It allows for the parameterization of up to 15 different products. An automatic “basic settings” function facilitates the determination of the parameters. The result is further optimized through the statistical evaluation of larger measurement series. By means of the software tool, test- and compensation cycles can be actuated and data can be imported or exported.

The software disposes of a Log-function wherewith all test results can be stored in a text file. Herewith e.g. a statistical evaluation can be carried out.

Additionally, a detailed description of the serial inter face is available, clarifying all commands utilized to record the pure sensor values and evaluate them with the own software.



Dimensions

- Length: app. 93mm
- Breadth: app. 70mm
- Height: app. 25mm

Power supply

- 24VDC +/- 10%
- 0,2 A

Weight: app. 250g

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