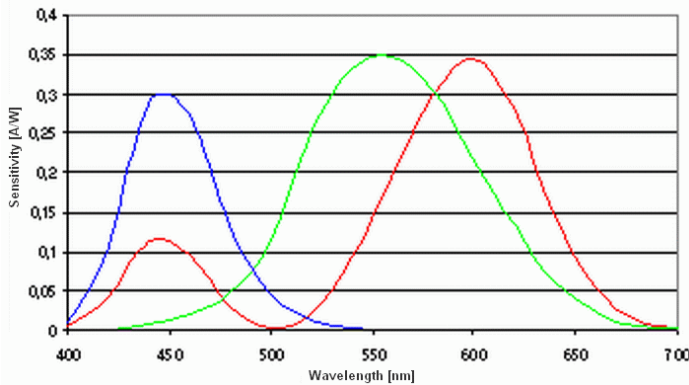


Color Sensor PR0048



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. Disturbances through environment light are automatically compensated. Color and intensity of the test objects can be parameterised and evaluated separately. The module is optimised for high-speed processing. The internal cycle time amounts to 500us.



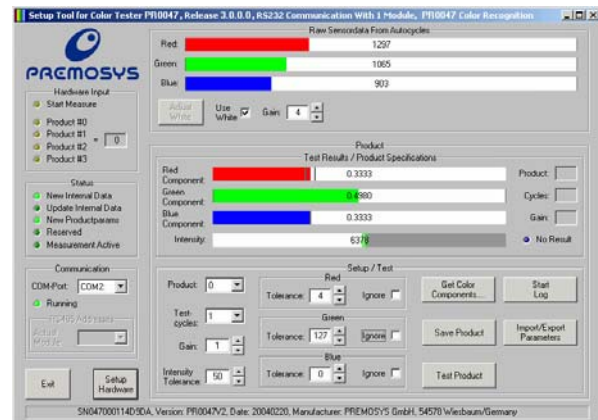
This figure shows the spectral distribution curve of the integrated three-sector Color sensor. The sensor values are enhanced in a way that a Color outcome is generated in independence from the intensity.

Main characteristics of the module:

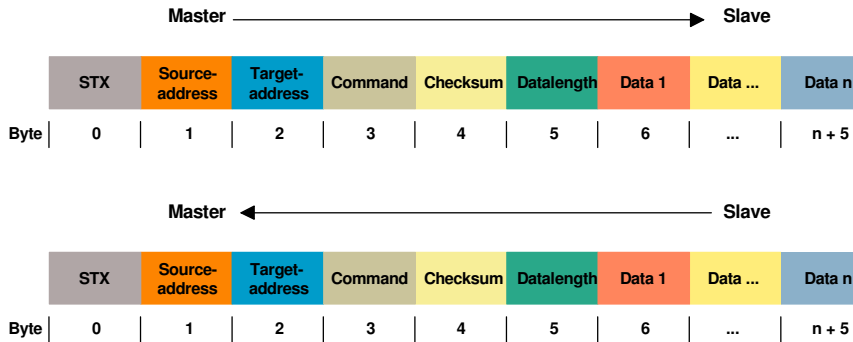
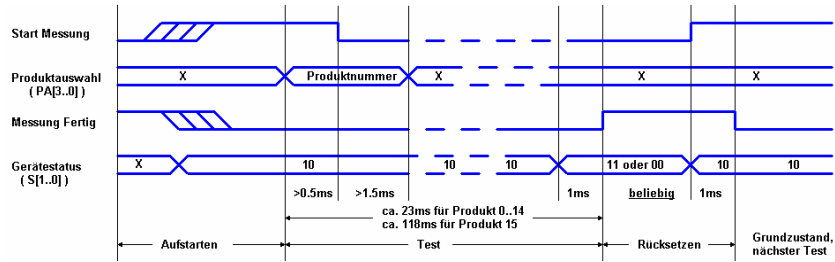
- Test of products for their Color and intensity
- Variable interfaces I/O and serial
- internal Resolution of 13 bit
- Resolution of PC-Tool 16 bit
- absolute Measuring $\Delta E < 5$
- Dynamic >90 db
- 14 amplification levels
- Wavelengths 400 - 700nm
- Parallel registration of all Color conducts
- White adjustment with reference to standard panels
- Temperature compensation within the range from 20-55 degrees °C
- Measuring distance from the utilised light guide 2-25mm

The scope of delivery includes a comfortable intuitive software tool for the commissioning, parameterisation and the statistical evaluation of test results. It permits the parameterisation of up to 15 different products. In the software tool, the input states of the ongoing product's signals are continuously displayed. An automatic "basic settings" function facilitates the determination of the parameters. The result is further optimised 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.

A detailed description of the serial interface is available in addition, clarifying all commands that can be utilised to record the pure sensor values and evaluate them with the own software. This is often necessary if the user demands a greater product traceability.



The software is compatible with WIN98/WIN-NT/WIN-XP.



The module can also be exclusively operated via the serial interface, which enables the user to e.g. process the sensor values with his own software. Both interfaces can be used simultaneously. We also provide RS422 models that can be connected to a bus.



The adaptation of the test objects to the module is carried out via light guides that can be delivered in the most different configurations.

Dimensions:

- Length: app. 93mm
- Breadth: app. 70mm
- Height: app. 25mm
- Weight: app. 250g

Electric connection:

- 24VDC +/- 5%, 0.2 A max.