

CIELab Color Sensor PR0094

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. Parasitic inductions by environmental light are compensated automatically.

Color and intensity of the test objects can be parameterized and evaluated with tolerances in Delta L and Delta ab independent from each other. On the basis of the tolerance values specified by the user, the software (which is needed for commissioning and teaching) calculates the full Delta E automatically.

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



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.



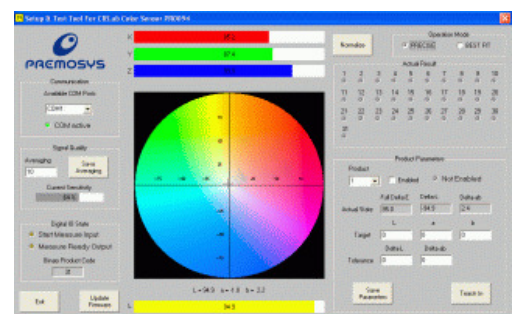
Technical data:

- Color and intensity test with indication of CIELab values
- Tolerances for up to 31 products in Delta L and Delta ab independently from each other
- Automatic adjustment of sensitivity
- 5 binary-coded product outputs
- Measuring resolution $\Delta E \geq 0,5$
- Internal resolution of 13 Bit
- Dynamic >100 db, Wavelength 400 - 700nm
- parallel registration of all color channels
- internal High Power white-light LED
- Color calibration onto standard color panels illuminant D50 as factory setting – custom designed color calibration also realizable by end-user
- Intuitive software tool for parameterization with automatic calculation and output of the ΔE
- Variable operational modes „Precise“ for exact color detection or „Best-Fit“ for the most alike color
- variable interfaces I/O and serial
- Measuring distance depending on the utilized light guides and optics 5-150mm

The scope of delivery includes a comfortable intuitive software tool for the commissioning. Parameterization, setting of the operational modes and tolerances for up to 31 different products from white to black is easy manageable.

All parameters get stored remanent on the sensor system and after that the serial interface can be cut. The system then completely works over the digital interface with other controllers.

In the software tool, the input states of the current product's signals are continuously displayed.



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

Dimensions

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

Power supply

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

Weight: app. 250g