# **LEX-1000**

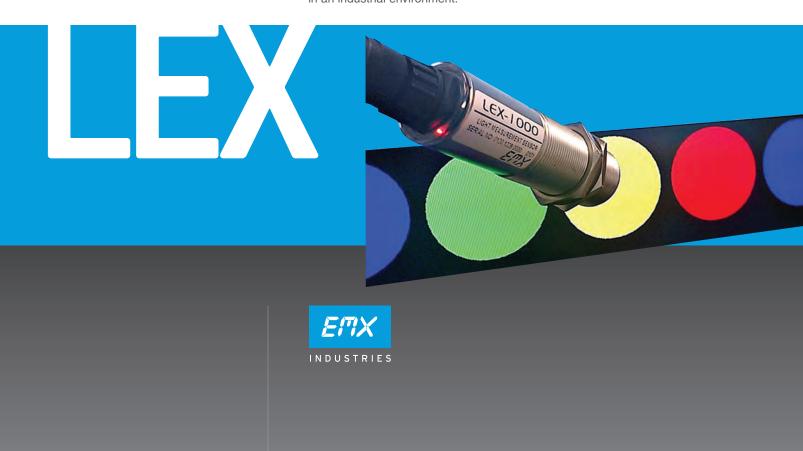
#### COLOR LIGHT MEASUREMENT SENSOR

The LEX-1000 color light measurement sensor is designed to measure relative color characteristics of a wide variety of light sources or illuminated objects by separating the light into its red, green and blue components. The LEX -1000 is the perfect solution for monitoring processes that involve light, performing comparative quality measurements on light emitting devices or any process where a comparative light measurement is necessary.

The sensor optics collects light and focuses this light onto a sensitive receiver element. The sensor analyzes the light for its constituent RGB (red, green, blue) values. If the readings of all of the three colors fall within the preprogrammed parameters, the sensor issues a discrete signal that indicates a color match. High-speed discrete outputs provide a standard interface to factory automation systems. The LEX-1000 provides four programmable color recognition channels, RGB analog outputs and serial communications via RS232 or USB.

ColorMax Windows<sup>™</sup> Application Program provides a comprehensive approach to sensor set-up, file management and real-time sample analysis and evaluation.

The 316SS case and glass lens/window provide the robust construction expected in an industrial environment.





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### **Applications**

- Automotive lighting verification
- LED, relative color measurement
- LCD and LED display quality
- Evaluation of all visible light sources

### Design & Features

- Fast response time
- · Highest resolution
- · Versatile, user supplied light sources
- · PC-based configuration software
- Programmable discrete outputs
- Serial data output
- · Analog outputs (RGB)
- USB / RS232 interface
- Lock out operator from changing settings
- Exclusive M30 housing

#### Ordering Information



LEX-1000 Color Light Measurement Sensor

#### Accessories



CM1000-KIT2

NOT INTENDED FOR USE IN PERSONAL SAFETY APPLICATIONS.

#### **Functions**

COLOR RECOGNITION
AVERAGING
TEACH
TOLERANCE
EXTERNAL TRIGGER
RGB VALUE DISPLAY
DISCRETE OUTPUTS

4 channels.

1 to 64 readings.

RGB values from 1 to 100%.

0.5% to 50%

Level, Edge, Free Run.

Bar graph - absolute value, Pie chart - relative value High or Low (V- or ground)

## **Specifications**

Receiver **Recommended Operating Distance Color Recognition Channels Color Recognition Discrete Outputs Sample Frequency Analog Outputs Power External Trigger** Communication **Protection Circuitry Dimensions** Weight Housing **Type of Protection Operating Temperature** Storage Temperature

**Connector Circular** 

**Accessosries** 

RGB photodiode

50mm...600mm (dependant on source intensity)

4

4

20 kHz

Red, green blue (3 channels 0...5V)

12 - 30 VDC

12 - 30 VDC

RS-232C / USB

Reverse polarity, over current (PTC thermal resettable fuse)

(length, Diamter) 110mm x 30mm

180g (.4lbs)

316 stainless steel

IP67 NOT FOR PRESSURE WASH DOWN

-10° to 55°C

-20° to 70°C

12-pin, IP67

Mounting bracket, jamb nuts (two), interface cable assembly, 12 VDC power supply, application software, I/O board with status indicators



- Exclusive PC-based configuration.
- Operator lockout prevents operators from changing the sensor settings in order to void reporting manufacturing quality issues.
- Software driven control of discrete output logic



WARRANTY EMX INC. the product described herein for a period of 2 years under normal use and service from the date of manufacture. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage. There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein. EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship.



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