

LEX-100

LIGHT MEASUREMENT SENSOR

Verify presence and measure relative light intensity of a wide variety of visible light sources, such as LEDs, monitors, and lamps. The LEX provides a receiver with a broad-spectrum response from 350nm to 1000nm. A fiber optic cable provides a light guide from the target source to the sensor receiver circuit allowing precise directional control. The LEX employs our field-proven, patented technology for fast response and presence indication making it suitable for many high-speed automation processes. The metal alloy case and metal fittings provide robust construction expected in an industrial environment.

The LEX features a 2-digit display that provides an indication of signal strength making set-up and integration quick and easy. The versatile sensor provides user set-up parameters including detection threshold and gain adjustment. A 2-meter fiber optic cable with threaded end fitting make mounting and positioning easy.

The LEX includes both a discrete PNP/NPN output and an analog output. The discrete output is automatically set for PNP or NPN operation. The analog output signal may be used to access light sources based on their light intensity. User supplied filters may be used to selectively measure specific colors.

LEX



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Applications

- Automated testing processes
- Verify light source on/off
- Monitor brightness of light sources
- Use filters for color applications

Design & Features

- High sensitivity and high resolution
- Fast response
- Display range 00-99
- Adjustable gain
- Analog output
- PNP/NPN discrete output
- Remote lock
- Replaceable fiber optic assembly

Ordering Information



LEX-100
Light Evaluation Sensor

Accessories



LEX-FBR
Fiber optic cable, 2-meter



UVX-300B
Bracket



UVX-300C
Cable 5P, 5M, M12, F



Fiber Optic Bracket
130-10250162

NOT INTENDED FOR USE IN
PERSONAL SAFETY APPLICATIONS.

Functions

NORMAL OPERATING MODE
CALIBRATION
THRESHOLD
HYSTERESIS LEVEL
DISCRETE OUTPUT
OUTPUT PULSE STRETCH
SECURITY
TEACH MODE

Displays relative light source intensity
User sensitivity adjustment
Set detection level
Set undetect level 1-9 steps below threshold
Set normally open or normally closed
Set minimum output period 10...90mS
Lock/unlock pushbutton controls
Auto-set detection threshold

Specifications

Optical input
Fiber optic cable length
Receiver Spectral Response
Response time
Switching Frequency
Relative intensity display range
Sensitivity
Signal level
Detection threshold
Digital Output
Output Function
Analog Output
Power indicator
Detect indicator
Programming indicator
Data retention
Dimensions
Weight
Supply Voltage
Operating Current
Short Circuit Protection
Overload / Reverse Polarity Protection
Operating temperature
Storage temperature
Housing
Mechanical Protection

2.2mm PMMA fiber optic
2 meter
350...1000nm
<150uS
6kHz
00 to 99
Adjustable
Two 7 segment digits
Two 7 segment digits
Auto-Detect PNP / NPN
NO/NC selectable
0...5V
Green LED
Red LED
Yellow LED
EEPROM non—volatile memory
51mm x 61mm x 25mm
(2.0" x 2.4" x 1.0")
95 g (0.21 lbs.)
10...24 VDC
60 mA
Discrete output
Supply voltage
-20°C...55°C
-20°C...70°C
Metal alloy
IP65 NOT FOR PRESSURE WASHDOWN

Indicators

7-Segment display
Green LED
Red LED
Yellow LED

LED
Power
Detect
Program

Connector M12

Pin 1
Pin 2
Pin 3
Pin 4
Pin 5

Power to 24VDC
Discrete output
PNP/NPN NO/NC
Ground
Analog output 0 to 5V DC
Remote LOCK/
UNLOCK input



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.