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

EMX INDUSTRIES

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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	Displays relative light source intensity
CALIBRATION	User sensitivity adjustment
THRESHOLD	Set detection level
HYSTERESIS LEVEL	Set undetect level 1-9 steps below threshold
DISCRETE OUTPUT	Set normally open or normally closed
OUTPUT PULSE STRETCH	Set minimum output period 10…90mS
SECURITY	Lock/unlock pushbutton controls
TEACH MODE	Auto-set detection threshold

Specifications

Optical input	2.2mm PMMA fiber optic
Fiber optic cable length	2 meter
Receiver Spectral Response	350...1000nm
Response time	<150uS
Switching Frequency	6kHz
Relative intensity display range	00 to 99
Sensitivity	Adjustable
Signal level	Two 7 segment digits
Detection threshold	Two 7 segment digits
Digital Output	Auto-Detect PNP / NPN
Output Function	NO/NC selectable
Analog Output	0…5V
Power indicator	Green LED
Detect indicator	Red LED
Programming indicator	Yellow LED
Data retention	EEPROM non—volatile memory
Dimensions	51mm x 61mm x 25mm (2.0” x 2.4” x 1.0”)
Weight	95 g (0.21 lbs.)
Supply Voltage	10...24 VDC
Operating Current	60 mA
Short Circuit Protection	Discrete output
Overload / Reverse Polarity Protection	Supply voltage
Operating temperature	-20ºC…55ºC
Storage temperature	-20ºC…70ºC
Housing	Metal alloy
Mechanical Protection	IP65 NOT FOR PRESSURE WASHDOWN

Indicators	
7-Segment display	LED
Green LED	Power
Red LED	Detect
Yellow LED	Program

Connector M12	
Pin 1	Power to 24VDC
Pin 2	Discrete output PNP/NPN NO/NC
Pin 3	Ground
Pin 4	Analog output 0 to 5V DC
Pin 5	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.

MADE IN THE USA

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