

UVX-100

LUMINESCENCE SENSOR

Confirm manufacturing processes more reliably than vision systems that cost ten times more. The UVX™ employs our field-proven, patented technology, for effective detection of UV luminescent materials such as wood, grease, adhesives, UV inks and optical brighteners used in many industrial applications. Its high-sensitivity and fast response makes the UVX suitable for high-speed automation processes. The metal alloy case and glass lens provide robust construction expected in an industrial environment.

The UVX 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 light source intensity adjustment, detection threshold and gain selection making the UVX useful in a wide range of applications.

The UVX 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 the relative quantity of UV materials such as optical brightener coatings applied to clear films.

UVX



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Applications

- Adhesives, gums and glues
- Labels, packaging
- UV inks, visible and invisible
- UV crayons and chalk, lumber marking
- Tamper-evident-seals
- Textiles, luminescent threads
- Optical brightness, paper industry
- Grease and oils

Design & Features

- Small spot size
- High sensitivity and high resolution
- Fast response
- Display range 00-50
- Two gain settings
- Analog output
- PNP/NPN discrete output

Ordering Information



UVX-100
Luminescence sensor

Accessories



UVX-300L50
50 mm focal lens



UVX-300B
Bracket



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

**NOT INTENDED FOR USE IN
PERSONAL SAFETY APPLICATIONS.**

Functions

NORMAL OPERATING MODE
SENSITIVITY
THRESHOLD
UV LED INTENSITY
HYSTERESIS LEVEL
DISCRETE OUTPUT
OUTPUT PULSE STRETCH
SECURITY
TEACH MODE

Displays relative reflection intensity
X1 and X10
Set detection level
Set LED, LO, MED, HI
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

Light source
Light spot size
Light source intensity
Sensing distance
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

370nm UV LED, 100,000 hrs.
6...8mm dia. @ 50mm
3 levels
up to 100mm
350...1000nm
<150uS
6kHz
00 to 50
X1, X10

Indicators

7-Segment display
Green LED
Red LED
Yellow LED

LED
Power
Detect
Program

Connector M12

Pin 1 Power to 24VDC
Pin 2 Discrete output
PNP/NPN NO/NC
Ground
Pin 3
Pin 4 Analog output 0 to
5V DC
Pin 5 Remote LOCK/
UNLOCK input

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



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.