

UVN-100

LUMINESCENCE SENSOR

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



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 undetected 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
- 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
- 51 mm x 61 mm 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

Confirm manufacturing processes more reliably than vision systems that cost ten times more. The UVN™ 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 UVN suitable for high-speed automation processes. The metal alloy case and glass lens provide robust construction expected in an industrial environment.

The UVN 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 UVN useful in a wide range of applications.

The UVN 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.

Ordering Information

UVN-100

Luminescence sensor

Accessories

UVN-300L50 50 mm focal lens

UVN-300B Bracket

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

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