UVX-300P
PHOSPHORESCENCE SENSOR

Confirm the presence of phosphorescent materials and pigments used in paints, adhesives, security inks and plastics reliably with the UVX-300P. The UVX™ employs our field-proven technology for effective detection in a wide variety of assembly, manufacturing and packaging processes. Since phosphorescent materials continue to emit light after the UV excitation have been removed, it is necessary to control sampling and measurement to assure that this does not interfere with the sensor detection process. High-sensitivity and fast response makes the UVX-300P 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 UXV 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 assess the relative quantity of UV materials such as phosphorescent inks, paints and adhesives.
**WARRANTY**

EMX INC. makes no warranty, express or implied, regarding defects in material or workmanship. This warranty does not cover ordinary wear and tear. This warranty does not extend to the repair or replacement of any product which has been subjected to misuse, abuse, alteration, or accident. This warranty does not extend beyond the description set forth herein. EMX INC. is not liable for damages of any nature, including incidental or consequential damages, including but not limited to any damages resulting from non-conformity of defects in material or workmanship. This warranty gives you specific legal rights. You may have other rights which vary from state to state.

**Applications**

- Phosphorescent materials
- Red pigments
- Invisible ink
- Specialty medical adhesive

**Design & Features**

- Small spot size
- High sensitivity and high resolution
- Fast response
- Display range 00-99
- Adjustable gain
- Analog output
- PNP/NPN discrete output

**Ordering Information**

- **UVX-300P**
  - Phosphorescence sensor

- **UVX-300P-FG**
  - Phosphorescence sensor
  - >500nm spectral response

**Accessories**

- **UVX-300L50**
  - 50 mm focal lens

- **UVX-300B**
  - Bracket

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

**Specifications**

- **Light source**: 370nm UV LED, 100,000 hrs.
- **Light spot size**: 6...8mm dia. @ 50mm
- **Light source intensity**: 3 levels
  - up to 350mm
  - 350...1000mm
  - 500...1000mm
- **Sensing distance**: <150s
- **Switching Frequency**: 6kHz
- **Relative intensity display range**: 00 to 99
- **LED Indicators**:
  - 7-Segment display
  - Green LED
  - Red LED
  - Yellow LED
- **Connector M12**:
  - Pin 1: Power
  - Pin 2: Detect
  - Pin 3: Program
  - Pin 4: Power to 24VDC
  - Pin 5: Discrete output
  - PNP/NPN NO/NC

**Functions**

**NORMAL OPERATING MODE**

- **CALIBRATION**
- **THRESHOLD**
- **UV LED INTENSITY**
- **HYSTERESIS LEVEL**
- **DISCRETE OUTPUT**
- **OUTPUT PULSE STRETCH**
- **SECURITY**
- **TEACH MODE**

**Functions**

- Displays relative reflection intensity
- User sensitivity adjustment
- 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

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