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 and long-range use. The small optical head allows use in space-constrained applications. 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 access the relative quantity of UV materials such as optical brightener coatings applied to clear films.
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 optical head
- Small spot size
- High sensitivity and high resolution
- Fast response
- Display range 00-99
- Five 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, x2, x3, x4, x5
- 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

### Applications
- Adhesives, gums and glues
- Labels, packaging
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### Ordering Information
UVX-300G-REM
Luminescence sensor with remote sensing head

### Accessories
- UVX-300B
  Bracket
- UVX-300C
  Cable 5P, 5M, M12, F
- UVX-300SB
  Sensor bracket

### Specifications

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light source</td>
<td>370nm UV LED, 100,000 hrs.</td>
</tr>
<tr>
<td>Light spot size</td>
<td>6...8mm dia. @ 50mm</td>
</tr>
<tr>
<td>Light source intensity</td>
<td>3 levels</td>
</tr>
<tr>
<td>Sensing distance</td>
<td>up to 300mm</td>
</tr>
<tr>
<td>Receiver Spectral Response</td>
<td>350...1000nm</td>
</tr>
<tr>
<td>Response time</td>
<td>&lt;150uS</td>
</tr>
<tr>
<td>Switching Frequency</td>
<td>8kHz</td>
</tr>
<tr>
<td>Relative intensity display</td>
<td>00 to 99</td>
</tr>
<tr>
<td>range</td>
<td>x1, x2, x3, x4, x5</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Two 7 segment digits</td>
</tr>
<tr>
<td>Detection threshold</td>
<td>Auto-Detect PNP / NPN</td>
</tr>
<tr>
<td>Digital Output</td>
<td>NO/NC selectable</td>
</tr>
<tr>
<td>Output Function</td>
<td>0…5V</td>
</tr>
<tr>
<td>Analog Output</td>
<td>Green LED</td>
</tr>
<tr>
<td>Power indicator</td>
<td>Red LED</td>
</tr>
<tr>
<td>Detect indicator</td>
<td>Yellow LED</td>
</tr>
<tr>
<td>Programming indicator</td>
<td>EEPROM non—volatile memory</td>
</tr>
<tr>
<td>Data retention</td>
<td>51mm x 61mm x 25mm (2.0” x 2.4” x 1.0”)</td>
</tr>
<tr>
<td>Dimensions (control)</td>
<td>30mm x 18mm x 20mm (1.2” x 0.7” x 0.8”)</td>
</tr>
<tr>
<td>Dimensions (sensor head)</td>
<td>1mm (40”)</td>
</tr>
<tr>
<td>Cable length (sensor head)</td>
<td>95 g (0.21 lbs.)</td>
</tr>
<tr>
<td>Weight</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>60 mA</td>
</tr>
<tr>
<td>Operating Current</td>
<td>Discrete output</td>
</tr>
<tr>
<td>Short Circuit Protection</td>
<td>Supply voltage</td>
</tr>
<tr>
<td>Overload / Reverse Polarity</td>
<td>-20ºC…55ºC</td>
</tr>
<tr>
<td>Protection</td>
<td>-20ºC…70ºC</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>Metal alloy</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>IP65 NOT FOR PRESSURE WASHDOWN</td>
</tr>
</tbody>
</table>

### Indicators

- 7-Segment display
- Green LED
- Red LED
- Yellow LED
- Connector M12
- Pin 1
- Pin 2
- Pin 3
- Pin 4
- Pin 5

- Power 10 to 24VDC
- Discrete output PNP/NPN NO/NC
- Ground
- Analog output 0 to 5V DC
- Remote LOCK/UNLOCK input

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

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.