

# UVX-300G-REM

## COMPACT 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 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 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



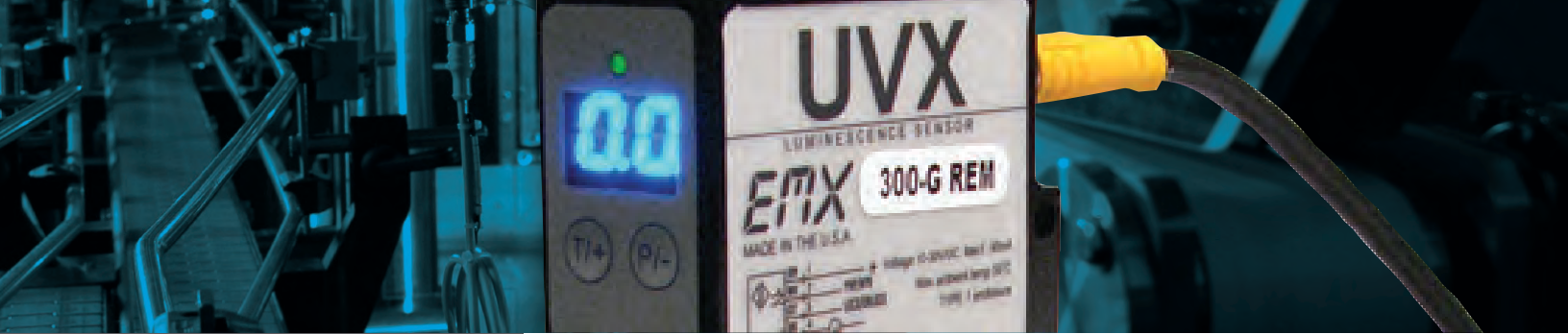
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## Applications

- 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 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

## 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

**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, 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

## Specifications

<b>Light source</b>	370nm UV LED, 100,000 hrs.	<b>Indicators</b>	LED
<b>Light spot size</b>	6...8mm dia. @ 50mm	<b>7-Segment display</b>	7-Segment display
<b>Light source intensity</b>	3 levels	<b>Green LED</b>	Power
<b>Sensing distance</b>	up to 300mm	<b>Red LED</b>	Detect
<b>Receiver Spectral Response</b>	350...1000nm	<b>Yellow LED</b>	Program
<b>Response time</b>	<150uS	<b>Connector M12</b>	
<b>Switching Frequency</b>	6kHz	<b>Pin 1</b>	Power 10 to 24VDC
<b>Relative intensity display range</b>	00 to 99	<b>Pin 2</b>	Discrete output PNP/NPN NO/NC
<b>Sensitivity</b>	x1, x2, x3, x4, x5	<b>Pin 3</b>	Ground
<b>Signal level</b>	Two 7 segment digits	<b>Pin 4</b>	Analog output 0 to 5V DC
<b>Detection threshold</b>	Two 7 segment digits	<b>Pin 5</b>	Remote LOCK/ UNLOCK input
<b>Digital Output</b>	Auto-Detect PNP / NPN		
<b>Output Function</b>	NO/NC selectable		
<b>Analog Output</b>	0...5V		
<b>Power indicator</b>	Green LED		
<b>Detect indicator</b>	Red LED		
<b>Programming indicator</b>	Yellow LED		
<b>Data retention</b>	EEPROM non-volatile memory		
<b>Dimensions (control)</b>	51mm x 61mm x 25mm (2.0" x 2.4" x 1.0")		
<b>Dimensions (sensor head)</b>	30mm x 18mm x 20mm (1.2" x 0.7" x 0.8")		
<b>Cable length (sensor head)</b>	1m (40")		
<b>Weight</b>	95 g (0.21 lbs.)		
<b>Supply Voltage</b>	24 VDC		
<b>Operating Current</b>	60 mA		
<b>Short Circuit Protection</b>	Discrete output		
<b>Overload / Reverse Polarity Protection</b>	Supply voltage		
<b>Operating temperature</b>	-20°C...55°C		
<b>Storage temperature</b>	-20°C...70°C		
<b>Housing</b>	Metal alloy		
<b>Mechanical Protection</b>	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.