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 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.
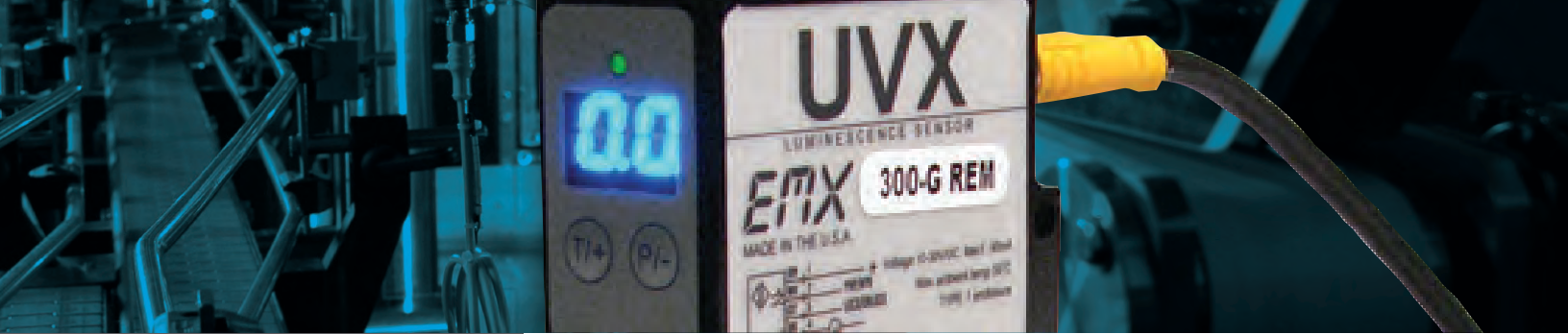

UVX

EMX

INDUSTRIES

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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	Displays relative reflection intensity
SENSITIVITY	x1, x2, x3, x4, x5
THRESHOLD	Set detection level
UV LED INTENSITY	Set LED, LO, MED, HI
HYSTERESIS LEVEL	Set undetect level 1-9 steps below threshold
DISCRETE OUTPUT	Set normally open or normally closed
OUTPUT PULSE STRETCH	Set minimum output period 10…90mS
SECURITY	Lock/unlock pushbutton controls
TEACH MODE	Auto-set detection threshold

Specifications

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

Indicators	
7-Segment display	LED
Green LED	Power
Red LED	Detect
Yellow LED	Program

Connector M12	
Pin 1	Power 10 to 24VDC
Pin 2	Discrete output PNP/NPN NO/NC
Pin 3	Ground
Pin 4	Analog output 0 to 5V DC
Pin 5	Remote LOCK/UNLOCK input

MADE IN THE USA