NEFTIM
APPLIED AUTOMATION TECHNOLOGIES

UVN-50-T
L U M I N E S C E N C E   S E N S O R

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

- 3.0mm spot size
- 25uS response time
- Two-button teach
- Automatic LED intensity adjustment
- PNP/NPN
- Discrete output
- Analog output
- Small Size

Functions

OPERATING MODE	The UVN-50-T is in operating mode in detect or undetect state
MARK	Sets mark level
BACKGROUND	Sets background level
RED LED ON	Mark detected
GREEN LED ON	Background detected
YELLOW LED ON	Mark or background measurement in progress
RED FLASHING	Background set, measure mark
GREEN FLASHING	Mark set, measure background
YELLOW FLASHING	Insufficient contrast

Specifications

Light source	370nm UV LED, 100,000 hours	**INDICATORS**		
		Green LED	Power	
Sensing distance	28min	Red LED	Detect	
Spot size	3.0mm dia.	Yellow LED	Program	
Depth of field	+/- 3 mm			
Response time	25uS	**CONNECTOR M12**		
Switching Frequency	40kHz	Pin 1	Power 10 to 24VDC	
LED intensity	3 levels	Pin 2	Analog output 0	
Sensitivity	1X, 10X		to 5V DC	
Digital Output	Auto-Detect NPN/PNP	Pin 3	Ground	
Security	LOCK/UN-LOCK keypad	Pin 4	Discrete output	
background indicator	Green LED		PNP/NPN	
Detect indicator	Red LED	Pin 5	Remote LOCK/	
Programming indicator	Yellow LED		UNLOCK input	
Data retention	EEPROM non—volatile memory			
Dimensions	2.0" (51 mm) x 2.4" (61 mm) x 1.0" (25mm)			
weight	0.21 lbs. (95g)			
Supply Voltage	10-24 VDC			
Operating current	60 mA			
Short circuit Protection	Discrete output			
Overload / Reverse Polarity Protection	Supply voltage			
Operating temperature	-20°C...55°C			
Storage temperature	-20°C...70°C			
Housing	Metal alloy			
Mechanical Protection	IP65 NOT FOR PRESSURE WASH DOWN			

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 provides simple, two-button teach with mark and background keys. The flexibility of the UVN makes it easy to set-up in a wide variety of printing, packaging and converting applications. The UVN is a perfect fit for many applications that require the ability to detect a luminescent mark or material.

The UXN 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 and coatings applied to clear films.

Ordering Information

UVN-50-T

Luminescence sensor

Accessories

UVN-300B Bracket

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