

UVN-50-T

LUMINESCENCE SENSOR

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 MARK

BACKGROUND RED LED ON

GREEN LED ON YELLOW LED ON

RED FLASHING GREEN FLASHING YELLOW FLASHING

The UVN-50-T is in operating mode in detect or undetect state
Sets mark level

Sets background level
Mark detected

Background detected
Mark or background measurement in progress

Background set, measure mark
Mark set, measure background
Insufficient contrast

Specifications

Light source

370nm UV LED,
100,000 hours

Sensing distance

28min

Spot size

3.0mm dia.

Depth of field

+/- 3 mm

Response time

25uS

Switching Frequency

40kHz

LED intensity

3 levels

Sensitivity

1X, 10X

Digital Output

Auto-Detect NPN/PNP

Security

LOCK/UN-LOCK keypad

background indicator

Green LED

Detect indicator

Red LED

Programming indicator

Yellow LED

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

INDICATORS

Green LED

Power

Red LED

Detect

Yellow LED

Program

CONNECTOR M12

Pin 1

Power 10 to 24VDC

Pin 2

Analog output 0

Pin 3

to 5V DC

Pin 4

Ground

Pin 5

Discrete output

PNP/NPN

Remote LOCK/

UNLOCK input

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

WARRANTY NEFTIM 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. NEFTIM Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at NEFTIM's option of a part or parts not so conforming to the warranty. In no event shall NEFTIM 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.