# CNTX-30-T

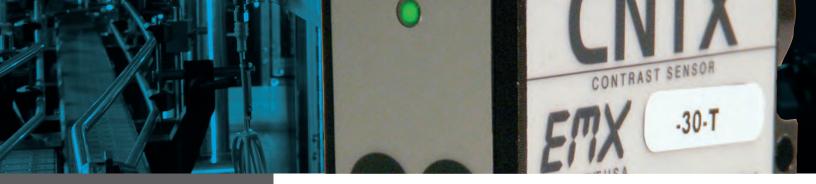
#### CONTRAST SENSOR

Increase process throughput with high-speed, accurate and reliable contrast differentiation. The CNTX<sup>™</sup> combines a broad-spectrum light source, small spot size and fast response to achieve high-speed contrast differentiation of both neutral and color targets. The CNTX employs our field-proven, patented technology, for effective detection of registration marks, glossy surfaces, cap inserts, date codes and sorting of product by color in many industrial applications. The metal alloy case and glass lens provide robust construction expected in an industrial environment.

The CNTX provides simple, two-button teach with mark and background keys. The flexibility of the CNTX makes it easy to set-up in a wide variety of printing, packaging and converting applications. The CNTX is a perfect fit for many applications that require the ability to differentiate between two conditions that vary in contrast.

The CNTX 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 targets based on their reflectance characteristics.





## **Applications**

- Sort products by color
- Detect registration marks
- Confirm presence of date codes
- · Detection of glossy surfaces
- Detects cap inserts

## **Design & Features**

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

## Ordering Information



CNTX-30-T Contrast Sensor

#### **Functions**

OPERATING MODE
MARK
BACKGROUND
RED LED ON
GREEN LED ON
YELLOW LED ON
RED FLASHING
GREEN FLASHING
YELLOW FLASHING

The CNTX-30-T is in operating mode in detect or undetect state Sets mark level Sets background level Mark detected Background detected

Background set, measure mark Mark set, measure background

Mark or background measurement in progress

Insufficient contrast

## **Specifications**

**White Light source** 

Sensing distance Spot size Depth of field Response time Switching Frequency **LED** intensity Sensitivity **Digital Output** Security **Background indicator Detect indicator Programming indicator Data retention Dimensions** Weight **Supply Voltage Operating Current Short Circuit Protection Overload / Reverse Polarity Protection Operating temperature** Storage temperature Housing **Mechanical Protection**  Broad spectrum LED,
min. 100,000 hours

28mm

3.0mm dia.
+/- 3mm

25uS

Indicators

Green LED
Red LED
Vellow LED
Program

Power
Detect
Program

 40kHz
 Pin 1
 Power 10 to 24VDC

 3 levels
 Pin 2
 Analog output 0 to 5V DC

 1X, 10X
 5V DC
 Ground

 Auto-Detect NPN/PNP
 Pin 3
 Ground

 LOCK/UN-LOCK keypad
 Pin 4
 Discrete output PNP/NPN

Remote LOCK/

**UNLOCK** input

Red LED Yellow LED EEPROM non—volatile memory 2.0" (51mm) x 2.4" (61mm) x 1.0" (25mm) 0.21 lbs. (95g)

10-24 VDC 60 mA Discrete output Supply voltage -20°C...55°C -20°C...70°C Metal alloy

IP65 NOT FOR PRESSURE WASH DOWN

#### Accessories



UVX-300B Bracket



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

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.

NOT INTENDED FOR USE IN PERSONAL SAFETY APPLICATIONS.