Increase process throughput with high-speed, accurate and reliable contrast differentiation. The CNTX™ 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 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 CNTX useful in a wide range of applications.

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
- 0.5mm or 3.0mm spot size
- 25μs response time
- Display range 00-50
- Broad spectrum white LED
- Adjustable LED intensity
- Two gain settings
- Programmable discrete output
- Threshold adjustment
- Analog output

Ordering Information
- CNTX-30-0
  Advanced Contrast Sensor
  3.0mm light spot
- CNTX-05-0
  Advanced Contrast Sensor
  0.5mm light spot

Accessories
- UVX-300B
  Bracket
- UVX-300C
  Cable 5P, 5M, M12, F

Specifications

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<th>Spot size</th>
<th>Depth of field</th>
<th>Response time</th>
<th>Switching Frequency</th>
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<td>28mm</td>
<td>0.5mm or 3.0mm dia.</td>
<td>+/- 3mm</td>
<td>25μs</td>
<td>40kHz</td>
<td>3 levels</td>
<td>00 to 50</td>
<td>1X, 10X</td>
<td>Two 7 segment digits</td>
<td>Two 7 segment digits</td>
<td>Auto-Detect NPN / PNP</td>
<td>NO/NC selectable</td>
<td>LOCK/UNLOCK keypad</td>
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<tr>
<td>7-Segment display</td>
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<tr>
<td>Power to 24VDC</td>
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<td>Ground</td>
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<td>0 to 5V DC</td>
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</table>

Functions

- Displays relative reflection intensity
  - X1 and X10
- 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

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.