

ColorMax HEX

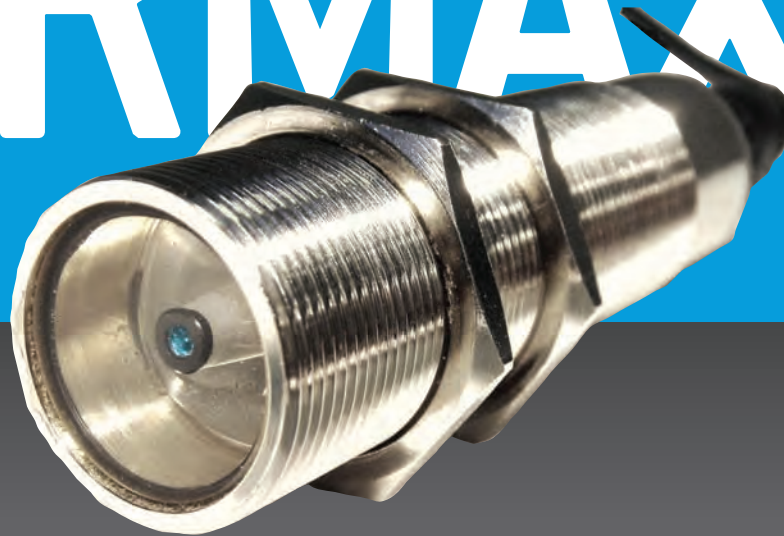
COLOR SENSORS

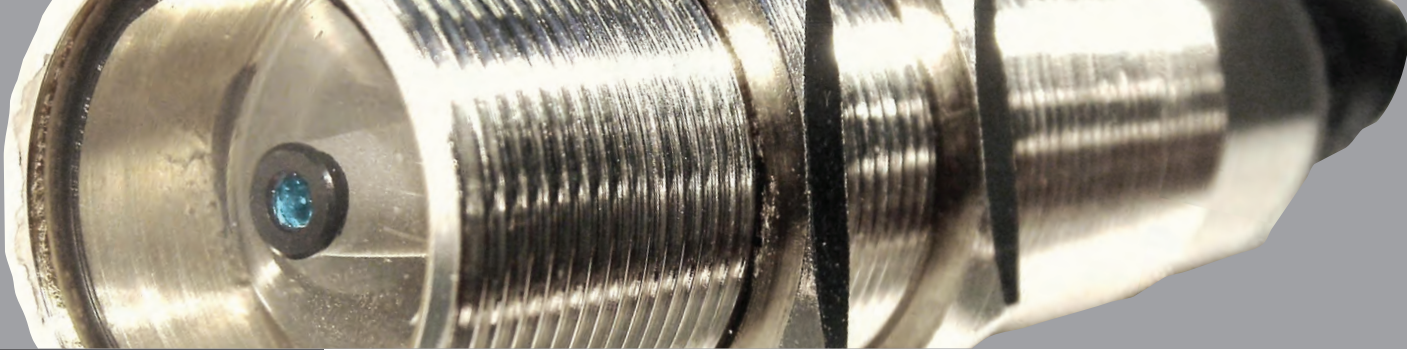
Verify the presence of targets that can be differentiated by color faster and with greater control. The ColorMax™ employs our field-proven, patented technology to provide an easy-to-use system for measuring color in a wide variety of applications. Fast response makes the ColorMax suitable for high-speed automation processes such as printing, packaging and sorting operations. Accurate color measurement and reliable performance makes the ColorMax the perfect choice for automotive, pharmaceutical and plastics industries.

The ColorMax HEX models provide 15 programmable color recognition channels encoded on 4 discrete PNP/NPN outputs for direct connection to PLC and Communications Protocol for high-level integration into your control systems.

ColorMax Application Program provides a comprehensive approach to sensor set-up, color channel management and real-time sample analysis display. Low color variation of 0.5% and a 20kHz switching frequency are the best specs in the industry, providing the performance required by demanding applications. The metal alloy case and glass lens provide robust construction expected in an industrial environment.

COLORMAX





Applications

- Automotive assembly, parts
- Packaging, pharmaceutical, food
- Plastic and rubber parts
- Electronic components
- Paper labels, printing

Design & Features

- Fastest response time
- Highest resolution
- Auto-teach and manual functions
- Sophisticated algorithms that ignore luster
- PC-based configuration
- USB / RS232 Interface
- Lock out operator from changing settings

Ordering Information



Model	spot size (mm)
CM1000-15HEX4	4
CM1000-15HEX8	8
CM1000-15HEX25	25

Accessories



CM1000-KIT2

Functions

COLOR RECOGNITION
AVERAGING
TEACH
TOLERANCE
EXTERNAL TRIGGER
ILLUMINATION
RGB VALUE DISPLAY
DISCRETE OUTPUT

15 channels
 1 to 64 readings
 RGB values 1 to 100%
 0.5% to 50%
 Level, Edge, Free Run
 0 to 100%
 Bar graph - absolute value, Pie chart - relative value
 High or Low (V₋ or ground)

Specifications

Detection Range

4mm spot 30mm-50mm
 8mm spot 30mm-100mm
 25mm spot 30mm-150mm

Recommended Operating Distance Spot Diameter

50mm
 4,8 or 25mm @ 50mm
 target distance

Light Source Switching Frequency

White LED
 20 kHz

Receiver

RGB photodiode

Discrete Outputs

4 (binary encoded for 15 channels)

Power

12-30 VDC

External Trigger

12-30 VDC

Communication

RS-232C / USB

Protection Circuitry

Reverse polarity, over current
 (PTC thermal resettable fuse)
 (length, diameter) 110mm x 30mm

Dimensions

180g (.4lbs)

Weight

316 stainless steel

Housing

IP67 NOT FOR PRESSURE WASH DOWN

Type of Protection

-10 to 55°C

Operating Temperature

-20 to 70°C

Storage Temperature

12-pin, IP67

Connector Circular

Mounting bracket, jam nuts (two), interface cable
 assembly, 12 VDC power supply, application
 software, I/O board with status indicators



- Exclusive PC-based configuration.
- Operator lockout prevents operators from changing the sensor settings in order to avoid reporting manufacturing quality issues.
- Software driven control of discrete output logic



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.

MADE IN THE USA

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