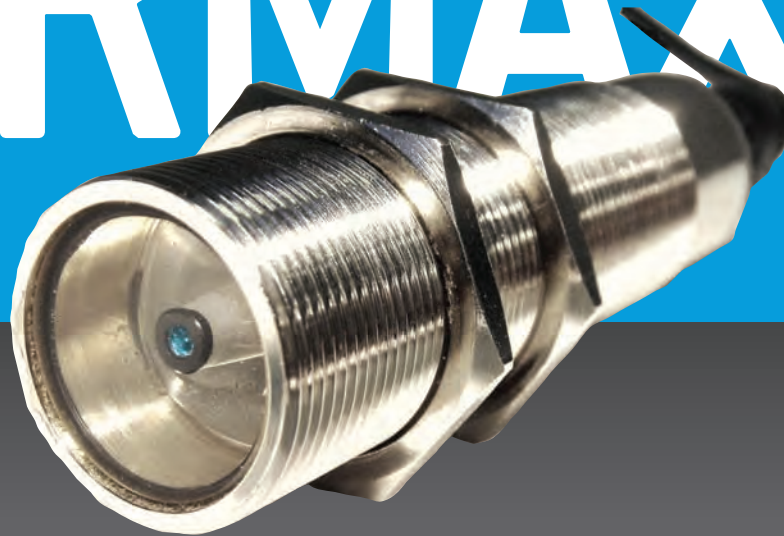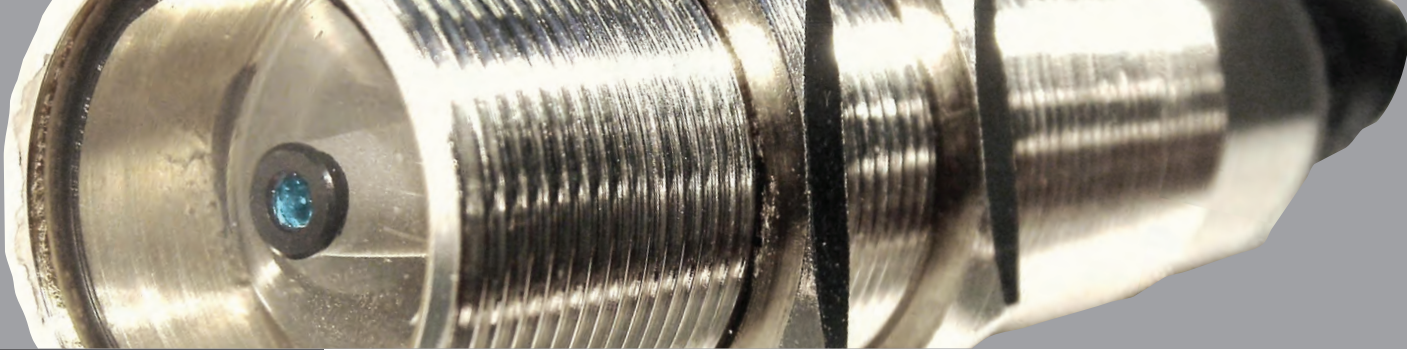# ColorMax HEX

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

EMX
INDUSTRIES

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	15 channels
AVERAGING	1 to 64 readings
TEACH	RGB values 1 to 100%
TOLERANCE	0.5% to 50%
EXTERNAL TRIGGER	Level, Edge, Free Run
ILLUMINATION	0 to 100%
RGB VALUE DISPLAY	Bar graph - absolute value, Pie chart - relative value
DISCRETE OUTPUT	High or Low (V_ or ground)

Specifications

Detection Range	4mm spot 30mm-50mm
	8mm spot 30mm-100mm
	25mm spot 30mm-150mm
Recommended Operating Distance	50mm
Spot Diameter	4,8 or 25mm @ 50mm
	target distance
Light Source	White LED
Switching Frequency	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)
Dimensions	(length, diameter) 110mm x 30mm
Weight	180g (.4lbs)
Housing	316 stainless steel
Type of Protection	IP67 NOT FOR PRESSURE WASH DOWN
Operating Temperature	–10 to 55°C
Storage Temperature	–20 to 70°C
Connector Circular	12-pin, IP67
Accessories	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

C E ETL

NOT INTENDED FOR USE IN PERSONAL SAFETY APPLICATIONS.

MADE IN THE USA

SENTRONIC AG Produkte, Support und Service

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