# ColorMax Discrete

COLOR SENSORS

Verify the presence of targets that can be differentiated by color faster and with greater control. The ColorMax<sup>™</sup> 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 discrete models provide 1, 4, or 7 programmable color recognition channels with PNP/NPN outputs for direct connection to PLC for easy integration into your automation 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.





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

- · 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



Model	outputs	spot size (mm)
CM1000-1-4	1	4
CM1000-4-4	4	4
CM1000-7-4	7	4
CM1000-1-8	1	8
CM1000-4-8	4	8
CM1000-7-8	7	8
CM1000-7-25	7	25



CM1000-KIT2

### **Functions**

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

Up to 7 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** 

**Recommended Operating Distance Spot Diameter** 

> **Light Source Switching Frequency** Receiver **Discrete Outputs Power External Trigger** Communication **Protection Circuitry**

**Dimensions** Weight Housing Type of Protection **Operating Temperature Storage Temperature Connector Circular Accessories** 

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

4.8 or 25mm @ 50mm

target distance White LED

20 kHz

RGB photodiode

1.4 or 7

12-30 VDC

12-30 VDC

RS-232C / USB

Reverse polarity, over current

(PTC thermal resettable fuse)

(length, diameter) 110mm x 30mm

180g (.4lbs)

316 stainless steel

IP67 NOT FOR PRESSURE WASH DOWN

−10 to 55°C

-20 to 70°C

12-pin. IP67

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





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