EMX
INDUSTRIES, INC.

EMX Increases Operating Range and Illuminated Spot for RGB Analog Outputs

New Sensor Replaces Sophisticated Color Sensing Systems

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Cleveland, May xx, 2007 – EMX Industries Inc., a manufacturer of sensors for automation, introduces the ColorMax™-1000 Super Range, its newest color sensor with a 150-mm operating range and a 25-mm illuminated spot. The long range sensing capability allows the sensor to be mounted away from moving machinery parts, protecting it from potential mechanical damage. The large illuminated spot generates a large data sample that provides more information about the color the sensor is analyzing. More information provides higher accuracy and speed.

The long-range feature will initially be available in the full RGB analog and the HEX 15 color models. Primary applications for the ColorMax-1000 Super Range sensor include carpet, paper and plastic sheet manufacturing processes and converting.

The ColorMax™-1000 Super Range color sensor is the newest member of the ColorMax-1000 series of sensors. These sensors can be used in applications that now require sophisticated color-sensing equipment. Color variations detected by the sensor are used as input by an automated system to take corrective action. With this approach, the controller can make minor in-process adjustments without reprogramming or

operator intervention. In addition, instead of the sensor making the match decision, a controller now can perform this function. For the first time, process engineers have the option of developing their own algorithms for color control. Using color-intensity data from the sensor, a controller can store and make matching decisions on a virtually unlimited number of colors.

Like other sensors in the ColorMax product family, the ColorMax-1000 Super Range sensor incorporates patented technology and innovative design features, including sample speed two to five times faster than that of competing sensors, an M30 threaded enclosure that simplifies adjustment and installation, and the industry's highest resolution and repeatability.

The ColorMax-1000 Super Range color sensor has a high-intensity white LED that projects modulated light on a target. The sensor analyzes the reflected light for its constituent RGB values and intensities. High accuracy, stability, and sophisticated software algorithms enable the ColorMax-1000 Super Range sensor to meet the resolution and speed requirements of advanced manufacturing processes.

M30 Enclosure Simplifies Installation and Adjustment
ColorMax-1000 sensors are the only color sensors available in an M30 threaded enclosure. Installation is fast and easy, and distance can be adjusted up to three inches simply by turning the sensor. In contrast, all other color sensors require users to install a special mounting bracket.

High Resolution and Repeatability, Fast Sampling
By employing low-noise technology in the ColorMax-1000 sensor family, EMX reduced color variation to 0.5% – the best specification in the industry. High resolution is especially important for detecting color variations at high speeds. In addition, the 5-kHz sample speed of ColorMax-1000 sensors is two to five times faster than that of other color sensors – fast enough to keep up with demanding high-speed manufacturing processes.

Secure Operation
For operational security, a supervisor can lock the unit's settings, either remotely or

directly on the unit. This feature prevents operators from changing sensor settings to avoid having to report manufacturing quality issues. Most color sensors do not offer this level of assurance.

Ability to Ignore Luster

Because color sensing is based on a measurement of reflected light, color sensors can be 'fooled' by the luster of shiny surfaces. ColorMax-1000 sensors overcome this challenge by using sophisticated software algorithms that ignore luster. Few color sensors offer this capability.

Fast and Convenient Integration

ColorMax-1000 sensors are the only color sensors that can be programmed via a PC, simplifying sensor installation. If additional sensors are added or if a sensor is replaced, the technician can copy and paste the color profiles stored in the PC software. Color profiles will not be lost if a sensor stops working.

In addition, ColorMax-1000 sensors are the only color sensors that automatically detect the PLC connection for PNP or NPN configuration during setup. This feature simplifies ordering and reduces stocking requirements by 75%, because users and distributors no longer need to stock different versions of the sensor.

Unlike some competing sensors, the ColorMax-1000 sensor line includes both auto-teach and manual calibration. This makes the sensors easy for low-skill operators to calibrate; yet it provides the ability to be finely tuned.

LED indicators for power, programming, and detection functions aid in setup and troubleshooting. ColorMax-1000 sensors feature an IP67-rated nickel-plated brass housing suitable for a wide range of manufacturing environments, plus short-circuit, over-current, and reverse polarity protection. Connections are made via a circular 12-pin connector.

Price and Availability

The ColorMax-1000 Super Range color sensor from EMX is available three weeks ARO. List price for one sensor is $YY, with discounts available for quantity orders.

To request a data sheet on the ColorMax-1000 Super Range sensor, or to talk to an applications engineer about how color sensors can reduce manufacturing costs and improve processes, call EMX at 800-426-9912, send email to salessupport@emxinc.com, or visit the EMX web site at www.emxinc.com.

About EMX Industries

EMX Industries Inc. manufacturing and engineering is located in Cleveland, Ohio, where the company relies on the local infrastructure and talent to design and manufacture unique sensors that solve problems in difficult applications. The EMX principle, Engineered to Manage Your X factor™, guides all our actions and is part of every product we make.

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