Features & Benefits
■ Low cost color solution vs. cameras, other sensors or spectrometers
■ Solves difficult shade-to-shade or color-to-color applications
■ Selectable outputs, timers, resolution, speed, etc. to fit any/all applications
■ 4-Channel Monitor for at-a-glance performance feedback
■ 4 Digital Outputs and 3 Analog Outputs
■ Selectable Speed versus Resolution
■ Selectable Color versus Color + Intensity
■ Captures color from HMI, PLC or remote button

Applications
■ Automotive Assembly
■ Pharmaceutical
■ Commercial Baking
■ Graphic Arts
■ Bottling Lines
■ Verification of correct color cap, label, or object
■ Registration mark detection while ignoring color graphics

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The wisest choice you can make!
**Specifications**

**SUPPLY VOLTAGE**
- 12 to 24 VDC
- Polarity Protected
- Intended for use in Class 2 circuits

**CURRENT REQUIREMENTS**
- CW-1: 110mA@12VDC, 80mA@24VDC
- CW-2: 140mA@12VDC, 85mA@24VDC

**PERFORMANCE**
- CW-1: Effective Resolution: Min. 12 bit, Max. 16 bit
- CW-2: Effective Resolution: 14 bit

**OPTICAL CHARACTERISTICS**
- Light emitter: White LED
- Optical axis: CW-1: Coaxial; CW-2: Convergent
- Receiving spectrum: 400nm to 700nm

**DIGITAL OUTPUTS**
- Four (4) selectable NPN or PNP open collector outputs
- 75 mA capacity
- Short circuit & transient voltage protected
- Residual voltage: NPN, 1.35 max.; PNP, 2.05 max.

**ANALOG OUTPUTS**
- Three outputs: Selectable as XYZ for color differentiation (RGB equivalent) or xyY for color + intensity differentiation
- 0-5 VDC +/-1%
- 10 bit resolution
- Max load per channel: 2k OHMS
- Transient Suppression

**OUTPUT SELECTION**
- LO (Light On or Color Match)
- DO (Dark On or No-Match)
- Mute (Channel Off)

**REMOTE CAPTURE INPUT**
- Input time: 25mS (ON) / 25mS (OFF) minimum
- Selectable (sinking or sourcing)
- Contact or solid-state input 1mA
- Transient suppression

**GATE/LATCH INPUT**
- Selectable NPN/Sinking or PNP/Sourcing
- Selectable EDGE or GATE trigger for latch reset or inhibit for windowing
- Contact or solid-state input 1mA
- Transient suppression

**TIMER**
- On delay, off delay, one shot, and latch
- Duration: 1mS to 10 seconds +/-1%

**DIAGNOSTIC INDICATORS**
- Output Indicator – (Amber)
- CH 1 through CH 4
- Four Character Alpha-Numeric Display – (Green)

**AMBIENT LIGHT IMMUNITY**
- Responds to sensor’s pulsed modulated light source – immune to most ambient light including indirect sunlight

**HUMAN INTERFACE**
- Pushbutton control: Select, Next

**AMBIENT TEMPERATURE**
- -5°C to 55°C (23°F to 131°F)
  - No ice, frost, or fogging allowed

**STORAGE TEMPERATURE**
- 5°C to 90°C (41°F to 104°F)

**RELATIVE HUMIDITY**
- 35% to 85%

**VIBRATION**
- 10 to 55 Hz, 0.5 mm, 30 minutes each axis

**SHOCK**
- Half-sine wave, 30g, 11μs 6 time 3 axis

**CERTIFICATIONS**
- CE - Complies with IEC 60947-5-2 edition 3.0 2007-10
- UL & CUL listed; CCN NRKH & NRKH7

**LENS MATERIAL**
- Acrylic or glass

**RUGGED CONSTRUCTION**
- Chemical resistant, high impact polycarbonate housing
- Waterproof ratings: NEMA 4, IP65.

**Connections and Dimensions**

- SEB-4 Mounting Bracket with Hardware
- UL Compliant

**Diagrams and Illustrations**

- Connections and Dimensions
- AMBIENT LIGHT IMMUNITY
- TRANSMITTER CONNECTIONS

**Industrial Grade Sensor**

- SMARTEYE® ColorWise™

**Additional Information**

- 004-0154
- Product subject to change without notice.

RoHS Compliant