

Specifications



SUPPLY VOLTAGE

- 12 to 24 VDC
- Polarity protected

CURRENT REQUIREMENTS

- 75mA (exclusive of load)

OUTPUTS

Digital (Switching)

- Models with complementary NPN output transistors sink up to 100mA @ 40 VDC max
- Models with complementary PNP output transistors source up to 100mA @ 40 VDC max
- Zener protected against voltage spikes

Analog (DC Proportional)

- Output swings from 0 up to 3 volts less than supply voltage with RL greater than 10K ohms Models SAQ and HSAQ
- Approximates near linear output

HYSTERESIS

- 400 millivolts for maximum sensitivity and resolution

LED LIGHT SOURCE WAVELENGTH

- A. Infrared = 880nm
- B. Red = 660nm
- C. Green = 550nm

RESPONSE TIME

- Minimum duration of input event – Beam Make or Beam Break
- High Speed Models = 500 microseconds, 1000 input events per second
- High Gain Models = 1.5 milliseconds, 333 input events per second
- Very High Speed Models = 100 microseconds, 5000 input events per second
- Analog Models = Speed of response represents rise time output from 10% to 90% of voltage swing

LIGHT IMMUNITY

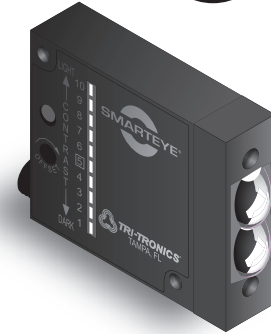
- Pulse modulated to provide extremely high immunity to ambient light—including sunlight

AMBIENT TEMPERATURE

- -40°C to 70°C (-40°F to 158°F)

RUGGED CONSTRUCTION

- Chemical resistant, high impact poly carbonate housing
- Epoxy encapsulated for mechanical stability
- Waterproof, ratings: NEMA 4X, 6P and IP67



ADJUSTMENTS AND INDICATORS

- OFFSET – Sets initial level in relation to switch point of “5” on CONTRAST INDICATOR– also functions as a sensitivity adjustment
- OUTPUT INDICATOR – LED illuminates and output switches when returned light level exceeds “5” on CONTRAST INDICATOR
- CONTRAST INDICATOR – Displays scaled reading of contrasting light levels (light vs. dark) on a 10-bar LED display
- ANALOG MODELS – Gain sets amplification level to light /dark differential

RoHS Compliant

Product subject to change without notice

Connections and Dimensions

SMART EYE® CLASSIC PHOTOELECTRIC SENSOR

