

Specifications

SUPPLY VOLTAGE

- 12 to 24Vdc
- Polarity Protected

CURRENT REQUIREMENTS

- 85 mA (exclusive of load)

OUTPUT TRANSISTORS

- (1) NPN and (1) PNP output transistor:
NPN: Sink up to 150mA
PNP: Source up to 150mA
- Momentary short circuit protected
- Outputs protected from pulsing during power up
- Light/Dark switch determines output status:
Light = Light ON operate
Dark = Dark ON operate

RESPONSE TIME

- Minimum duration of input event:
Light state response = 50 microseconds
Dark state response = 140 microseconds
- Leading edge variation less than 20 microseconds

LIGHT IMMUNITY

- Responds to sensor's pulsed modulated light source – resulting in high immunity to most ambient light, including sunlight

HYSTERESIS

- Less than 400 millivolts for maximum sensitivity and resolution

LED LIGHT SOURCE

- Pulse modulation rate 36 KHZ.
- Choice of color: A. Infrared = 880nm
B. Red = 660 nm C. Blue = 480nm
D. White = Broadband Spectrum

INDICATORS

- OUTPUT INDICATOR – RED LED illuminates when the output transistors are in the ON state as determined by the position of the Light/Dark switch
- BEAM STATUS INDICATOR – RED LED illuminates when returned light level exceeds "5" on the CONTRAST INDICATOR
- EDR® INDICATOR – Intensity of GREEN LED provides indication of where in the dynamic operating range the offset/EDR® adjustment has been set
- CONTRAST INDICATOR™ – Displays scaled reading of sensor's response to contrasting light levels (light vs. dark) on a 10 bar LED display



OFFSET/EDR ADJUSTMENT*

- Sets initial level on the CONTRAST INDICATOR™ in relation to mid-scale switch point of 5 – functions as sensitivity adjustment
- Controls Enhanced Dynamic Range circuit (EDR®) which functions to avoid saturation

AMBIENT TEMPERATURE

- -40°C to +70°C (-40°F to 158°F)

RUGGED CONSTRUCTION

- Chemical resistant housing
- Rated NEMA 4X, 6P and IP67
- Epoxy encapsulated for mechanical strength.

Product subject to change without notice.
Consult Factory for RoHS Compliance.

Connections and Dimensions

SMARTEYE® MARK III PHOTOELECTRIC SENSOR

