

CI-200 360° Passive Infrared Sensor

CI-200
CI-205

1. The passive infrared sensor shall be capable of detecting presence in the control area by detecting changes in the infrared energy. Small movements shall be detected such as when a person is writing while seated at a desk within an 8 feet radius of the sensor.
2. To avoid false ON activations and to provide high sensitivity to minor motion, Pulse Count Processing and Detection Signature Analysis shall be used to examine the frequency, duration, and amplitude of the signal received by the sensor to respond only to those signals caused by human motion.
3. Sensor shall utilize mixed signal ASIC (application-specific integrated circuit) technology, which combines analog and digital processing into one chip package, to provide immunity to RFI and EMI.
4. Sensor shall utilize a temperature compensated dual element sensor and a multi-element Fresnel lens.
5. Fresnel lens shall be a Poly IR 4 based material to offer superior performance in the Infrared wavelengths and filter short wavelength infrared, such as those emitted by the sun and other visible light sources. Lens shall have grooves facing in to avoid dust and residue build up which affects IR reception.
6. To ensure sensitivity to small motion at the desktop, the sensor shall have a 34 element Extended Range lens (standard) or a 55 element High Density lens.
7. Sensor shall cover 360°, up to 1200 square feet of walking motion with the Standard Lens and up to 500 square feet of walking motion with the High Density lens when mounted at a ceiling height of 8 feet.
8. Sensor shall not protrude more than 0.36 inches from the ceiling and shall blend in aesthetically.
9. The CI-200 sensor shall have an additional single pole, double throw isolated relay with normally open, normally closed, and common outputs rated for 1 Amp at 24 VDC. The isolated relay is for use with HVAC control, data logging, and other control options.
10. The CI-200 sensor shall have two outputs; one output is based on occupancy only and the other is based on occupancy with a hold OFF and an internal photocell setting when a minimum light level is present (adjustable from 4 to 190 footcandles). CI-205 shall have just one occupancy based output.
11. For accuracy and consistency, sensor shall have a DIP switch controlled, digital time delay, adjustable from 15 seconds to 30 minutes.
12. Sensor shall have DIP switch sensitivity setting adjustable from minimum to maximum.
13. Sensor shall be furnished with DIP switch override-ON function for use in the event of a failure.
14. Adjustments and mounting hardware shall be concealed under a removable cover to prevent tampering with adjustments and hardware.
15. Sensor shall be capable of being wired in parallel to allow coverage of large areas.
16. To ensure quality and reliability, sensor shall be manufactured by an ISO 9002 certified manufacturing facility and shall have a defect rate of less than 1/3 of 1%.
17. Sensor shall have standard 5 year warranty.
18. Sensor shall be UL and CUL listed.

