Arceos ARS Controls

ARS LED luminaire with passive infrared motion sensor control option (individual luminaire control)

LED luminaires with motion sensor option can be configured to illuminate from low to high power or off to on when motion is detected. Luminaire will return to off or low when motion is no longer detected.

Examples & Design Considerations

- Digital Passive Infrared (PIR) sensor with dual element pyrometer and spherical fresnel lens for detection of major human motion/activity; The pyro detects the difference in the IR energy radiated from the background versus the moving object. The lens divides the coverage area into multiple zones. Dectection is dependent on movement between zones (see coverage pattern below). Objects in path of sensor line of sight can limit coverage.
- High/low or on/off capability available
- User programmable low settings of 70, 60, 50, 20 percent of power; Factory default is 50% of power
- 360° sensor range
- 16 ft. maximum mounting height indoors (wide lens standard)
- Low temperature (-30°C to 40°C maximum) indoor-outdoor sensors
- User programmable sensor setting mode (test/normal)
- Time out delay is field adjustable; User programmable settings of 4, 6, 8 & 30 min; Factory default setting is 8 minutes
- All units equipped with daylight harvesting which can be user enabled. Factory default setting is disabled; Ambient light range is user selectable from 1-50 FC; Daylight harvesting feature has precedence over motion control turning fixture completely on or off
- Sensor conforms to UL Standard 508, UL Standard 244A & IP65
- Conforms to California Title 24/ASRAE 90.1/CBEA

Examples & Design Considerations

- Start up delay from initial motion detection to fixture illumination is approximately 1-2 seconds
- Vehicle detection is possible however less reliable than human detection; Vehicle detection is dependent upon the following: rate of speed, mounting height of luminaire and vehicle back ground temperature (see coverage pattern below)

Sensor Range





Examples

48' Diameter at 8 ft. Mounting Height

- Luminaires installed at a typical 8 ft mounting height results in a 24 ft detection radius (48 ft. diameter). A vehicle moving 10 mph travels a distance of 15 ft per second. As a result illumination may not occur until vehicle is under luminaire.
- A pedestrian moving 3 mph travels a distance of 4.5 ft per second. As a result illumination would occur when pedestrian is within 15-20 ft of the luminaire.

Ordering Information

ARS luminaires offers the following motion sensor options:

- SCO On/Off control No light output when no motion detected Reference ARS specification page for additional ordering information
- SCP High/Low control user programmable; Factory default is 50%

