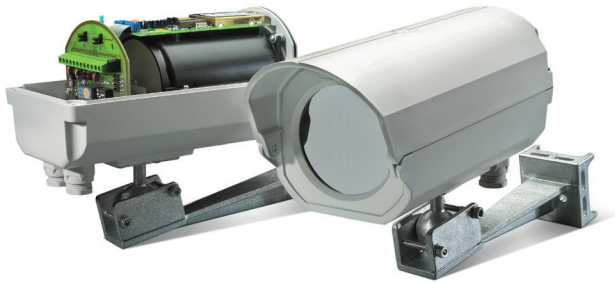


## The perimeter detection partner

SmarterBeam is a motion detector designed for outdoor use, to aid intrusion detection where it should start - at the perimeter. Three distinct models offer reliable passive infrared technology, and each is configured to deliver sensing capabilities for a unique coverage area.



### Benefits

#### More secure

- › Detects intruders crawling, walking, or running at speeds from .7 to 16 ft/s
- › Gap-free curtain coverage
- › 13-foot mounting height minimizes risk of vandalism
- › Anti-tamper protection sends alarm if detector alignment is altered

#### Easy to install and own

- › Supports flexible power supply - DC or AC
- › Remote access simplifies configuration and alarm management
- › Set-up and alignment are easy compared to other systems

#### Cost-effective

- › Reliability from precision engineering reduces units needed for covered area
- › Low power consumption allows for solar applications

### Operation

SmarterBeam detects intrusions using passive infrared (PIR) technology and telescope-like precision mirror glass optics. SmarterBeam detectors react to the slightest infrared radiation (temperature) change between a moving object and a stationary background. When an intruder moves into the field of view (detection zone), the variation is sensed and an alarm is triggered.

SmarterBeam detectors are engineered to provide unparalleled reliability and accuracy in the harshest environments. The detectors are single-ended, non-emitting devices - easy to install and undiscoverable by electronic means.

### Technology

- › Double optical filtering restricts infrared radiation to 8-14 micrometer band, the atmospheric window where snow, rain, humidity, and fog least affect the transmission of infrared radiation
- › Digital signal processing, adaptive threshold decoding (ATD), and signal shape analysis reduce the nuisance/alarm ratio to the lowest levels found in the industry
- › Automatic temperature compensation ensures consistent sensitivity across the entire operating temperature range
- › Advanced anti-vandal protection - SmarterBeam sends a tamper alarm when the detector's cover is opened or the alignment is altered
- › Heavy-duty front window and a heater enabling operation at -40°F

### Integration Options

SmarterBeam can be configured to:

- › Conditionally trigger CCTV, Pan/Tilt/ Zoom, and dome cameras to focus on intrusion area
- › Notify central monitoring stations an intrusion is occurring and further attention is needed
- › Turn on lights or play pre-recorded verbal messages

### Models

SmarterBeam is available in three models featuring distinct coverage patterns.

- › **CLR500:** Three-zone, continuous, "narrow-curtain" detection area with a range of 500' (150 m)
- › **CLR500+:** Three-zone, continuous, "narrow-curtain" detection area with a range of 500' (150 m), a unique alarm for each zone, and a steep tilt to minimize blind area directly below detector
- › **VWA100:** 100'-wide (30 m), "fan-out" detection area with a range of 90' (27 m)

Outdoor security

## SmarterBeam

Outdoor models

SmarterBeam SmarterFence

### Accessories

The following accessories are available for all models:

#### Data bus:

- > RS485 data bus connectivity
- > SB-485B is a USB / RS232 to RS485 interface
- > Interface connects via the test socket located inside the detector on the terminal board
- > No external power supply required

#### Software:

- > Designed to assist during the installation phase
- > Windows-based SmarterBeam software application
- > Easy-to-use Scope View allows real-time signal strength for accurate data analysis and characterization
- > Users can optimize performance, adjust sensitivity, observe signal strength, and create alarm log files with event time-stamps for all detectors sharing an RS485 data bus

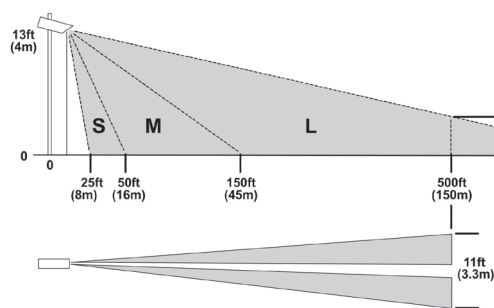
#### Pole mounting bracket:

- > Pole mount for CLR500 and VWA100 as alternative to included wall mount bracket
- > Pole mount for CLR500+ is different and can function as a wall mount also

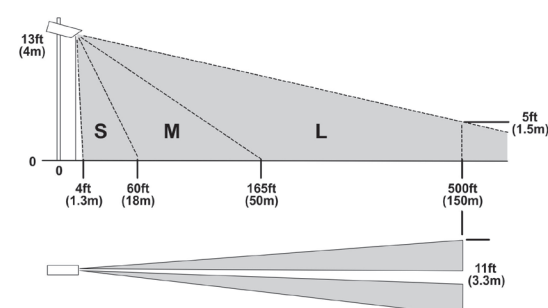
### Coverage Patterns

(Side view, top view)

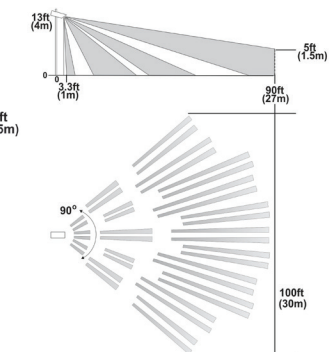
#### CLR500



#### CLR500+

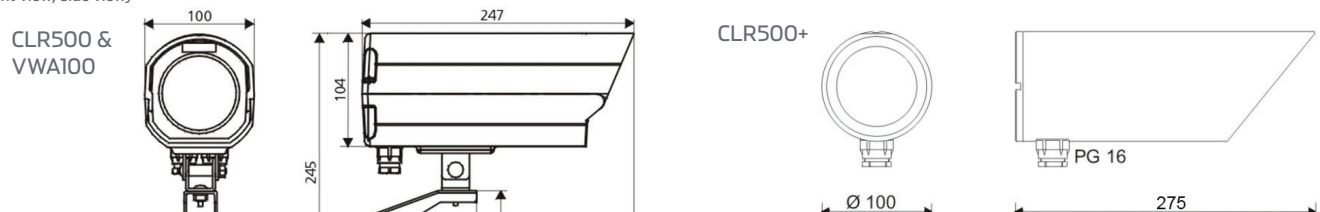


#### VWA100



### Dimensions

(Front view, side view)



### Technical specifications

#### Nominal optical range

- > CLR500: 500' (150 m)
- > CLR500+: 500' (150 m)
- > VWA100: 90' (27 m)

#### Width at nominal range

- > CLR500: 11' (3.3 m)
- > CLR500+: 11' (3.3 m)
- > VWA100: 100' (30 m)

#### Materials

- > Case material: heavy duty plastic
- > Color: white

#### Optics

- > Sensor: pyroelectric differential triple channel
- > Spectral response: 8 to 14 $\mu$ , double filtered
- > Optics: precision mirror glass
- > Window: silicon wafer
- > Detection speed: 0.7 to 16 ft/s (0.2 to 5 m/s)
- > Sensitivity adjustment: DIP switches and RS485

#### Electrical

- > Supply voltage: 10.5 to 30 V DC and 24 V AC (fll 15%)
- > Current (not activated): 18 mA (at 12 V DC), 10 mA (at 24 V AC)
- > Alarm relay output: 1 SPST 30 V DC, 100 mA max
- > Transistor open collector output: 1 NPN, 30 V DC, 50 mA
- > Cover switch: 30 V DC, 100 mA
- > Heating: 12 V DC/24 V DC
- > Heating power at -40°F (-40°C): typical 2 W
- > Turn-on time: typical 60 seconds from power on
- > Communication: bidirectional RS485 at 9,600 baud
- > LED alarm indicator: included
- > Test socket: included

#### Dimensions

- > Height: 4.1" (104 mm) without mounting bracket CLR500+: 3.9" (100 mm)
- > Length: 9.72" (247 mm) CLR500+: 10.8" (275 mm)
- > Width: 3.94" (100 mm)
- > Weight: 2 lbs (900 g) with mounting bracket CLR500+: 3.3 lbs (1.5kg)
- > Cable feed: 2 off M 16 CLR500+: 1 off PG 16
- > Cable diameter: 0.16" to 0.27" (4 to 7 mm) CLR500+: 0.47" to 0.55" (12 to 14 mm)
- > Mounting Height: 8' to 13' (2.5 to 4 m)

#### Environmental

- > Operating temperature: -40° to 140°F (-40° to 60°C)
- > Humidity: 95% RH max
- > Sealing: IP 64 splash proof

Due to continuous improvements, specifications are subject to change without prior notice.