



# **Motion Detector**

ES700PIR

State-of-the-art passive infrared detection

- √ 4th-generation DragonflyEye™ multi-zone spherical lens with "pet-immunity"
- ✓ Daylight and insect immunity with sealed optics
- √ Tamper-proof wall mount
- ✓ Wireless and battery-operated for easy, maintenance-free installation
- ✓ More than 3 years of usage on a single CR123A Lithium battery





The ES700PIR Motion Detector seamlessly integrates with the EverGuard and EverGuard Express control panels and other products from Essence Security

With millions of systems and security peripherals installed internationally, Essence Security is a technological and market leader in the field of advanced security solutions for homes, offices and full-service central monitoring stations



## **ES700PIR Motion Detector**

### **DESCRIPTION**

- The ES700PIR is a bi-directional wireless digital PIR detector.
- Utilizing proprietary 4th-generation DragonflyEye™ technology, the ES700PIR provides exceptional detection coverage, range and angle.
- Additionally, the ES700PIR has sealed optics and is immune to light and insects, further reducing false alarms.
- Advanced detection algorithms for false alarm suppression

### WIRELESS

- Bi-directional: End-to-End Bi-Directional ESI protocol
- Advanced radio supervision algorithm
- Up to 700 meters RF range (open air)
- Modulation and Frequency: BFSK, 868.3 MHz (Europe) or 916.5 MHz (US)
- Encoding: 32-bit ID, over 4 billion combinations

#### **SECURITY**

- Tamper Mechanism
- Unique electronic serial number

#### POWER CONSUMPTION

- Long operational period (over three years) without external power source
- Uses a single CR123A Lithium battery

#### SIZE & WEIGHT

- 106 mm (l) x 60 mm (w) x 51 mm (h)
- 67 grams + 19 grams wall-bracket + 17 grams battery (CR123A)

#### **ENVIRONMENTAL**

- Operating Ambient Temperature range: -5° 55° Celsius
- Humidity: Up to 95% non condensing

#### **CERTIFICATIONS AND APPROVALS**

- CE: CE mark, EMC/EMI according to ETSI EN 301 489-4, ETSI EN 301 489-1, EN 50130-4:1996, EU Directive 1999/5/EC for R&TTE
- Radio: ETSI EN 300 220-3, ETSI EN 300 220-1, CEPT/ERC Recommendation 70-03, EN 50131-5-3:2005 + A1:2008
- Safety: EN/IEC60950-1, TUV: UL60950-1, NOM
- Security & Alarm systems: EN 50131-1:2006 + A1:2009 Class-II Grade-2, EN 50131-2-2:2008 Class-II Grade-2, EN 50131-6:2008 Type-C
- Environmental Regulation: RoHS 2002/95/EC
- Reliability (Mechanical & Environmental conditions): EN 50130-5:1999 and IEC 60068
- Manufacturing and Materials Standards: ISO 9001:2008, ISO 14000

#### ADDITIONAL INFORMATION

- Detection Type: Passive Infrared
  - Insect Immunity: Sealed Optics
  - Pet Immune (option)
- Installation:

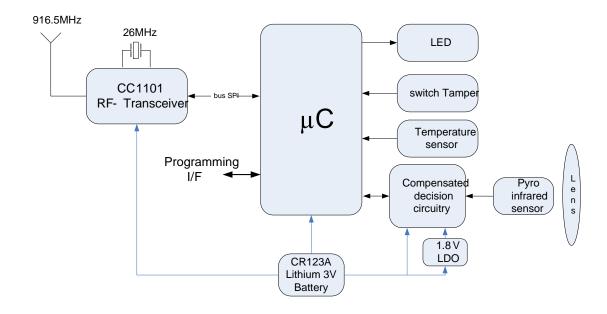
Standard PIR wall mount using double-sided tape

Certifications and approvals:









# **Block Diagram Description**

The CR123A single battery directly provides the power to the entire board.

The main micro-controller gets data from PIR sensor and tamper switch.

It interacts with the RF-transceiver chip.

The product have a red indication LED.

