## Motion/Intrusion/Vibration Sensors

### Door Contact, Vibration & Glass Break Detection Sensors

#### Door Contact Sensor
- Monitors access with a magnetic bridge sensor, which responds to any magnetic material (no special inserts necessary).
- Can also be used for monitoring side wall and covers.
- For normally closed circuit connection.
- Operating temperature: 32 to 158°F (0 to 70°C).

#### Rugged Door Contact Sensor
- Monitors access with a magnetic bridge sensor (no special inserts necessary).
- Ideal for commercial and industrial installations in harsh environments.
- Heavy-cast aluminum housing with 18 inch stainless steel armored cable.
- Floor-mounting hardware included.
- Universal-style magnet option has a smaller width and depth that provides greater installation flexibility.
- Wide actuating gap, approximately 2”.

#### Fence Vibration Sensor
- Detects when individuals climb over or cut through chain link or wire mesh fences.
- Two open-collector outputs – alarm and power failure.
- UV resistant case and epoxy sealed electronics provides maximum resistance to harsh environments.
- Use individually or chain units with each ranging from 40 to 60 feet away.
- Operating voltage: 9-15V DC.

#### Glass Break Detection Sensor
- Detects glass breakage through acoustical analysis.
- Continuous monitoring.
- Adjustable sensitivity and digital signal processing.
- Detection range: 25 feet.

#### Plunger-Style Door Contact Sensor
- Use to monitor access from sliding doors and windows.
- A captive magnet within the plunger activates a reed switch when the plunger is depressed.
- Plunger travel: 0.25” (6mm)
- Includes mounting hardware.
- For normally closed circuit connection.
- Maximum cable length: 1,000 ft
- Dimensions: 1.00x1.41x1.75

#### Vibration Sensor - Registers Movement & Shocks
- For registering movement and shocks - sensed through surface to which it is mounted.
- Trigger duration: 3.1 to 4.1 seconds.
- Voltage Supply: 5VDC
- Operating temperature: 32 to 104°F (0 to 60°C)
- Storage temperature: -22 to 140°F (-30 to 60°C)

#### Rugged Vibration Sensor – Detect Over- or Under-Vibration in Machinery
- For registering over- or under-vibration in machinery such as large motors, gear boxes, turbines, pumps, blowers, crushers, compressors, blenders, hammermills, and conveyors.
- Adjustable over/under alarm sensitivity: 0.1 to 2.2 in/s (2.5 to 55 mm/s) rms.
- Minimum vibration frequency (-3db): 10 Hz.
- Maximum vibration acceleration: ±1.76 oz (±50 g) peak.
- Isolated NPN output is fail-safe.
Motion/Intrusion/Vibration Sensors

**Low-Cost Infrared Motion Sensor – CE Compliant**

- Registers movement in area covered: 39x39 ft (12x12 m), 110° wide.
- Wall mount or hang in a corner.
- Pulse count adjustment.
- Good RFI protection.

**High-Mount Outdoor Infrared Motion Sensor**

- High-mount outdoor weatherproof sensor with 94 detection zones.
- Registers movement in area covered: 13/18/30/40 ft and 85° wide.
- Mounting height: 8.3 to 10 feet.
- Ideal detection area setting – adjustable length/spot detection.

**Ceiling Mount Motion Detector**

- Detects movement across the detection field.
- 360° detection pattern.
- 113° conical detection angle from ceiling.
- 36 ft diameter protection when mounted 12 ft high.
- Pulse count or single shot triggering.
- Good RFI protection

**Single Photobeam Detector, Indoor/Outdoor to 50’**

- Single-beam infrared motion sensor sends alert signal when invisible beam is broken.
- Sensing range: 3 to 50 feet (1 to 15m)
- Light Source: Infrared LED, wavelength 940nm
- LED Beam Spread Angle: Approximately ±10°
- Built-in AGC control to filter out lighting disturbances.
- LED indicator for power, signal

**Dual Photobeam Detector, Indoor to 790’, Outdoor to 390’**

- Twin infrared beams provide reliable perimeter security, minimizing false alarms from falling leaves, birds, etc.
- Lensed optics reinforce beam strength and provide excellent immunity to false alarms due to rain, snow, mist, etc.
- our selectable beam frequencies.
- Laser wavelength: 650nm
- LED indicator for power, signal strength, and alarm.
- NC/NO alarm output.

**Infrared Motion Detector - TAA, CE Compliant**

- Registers movement in area covered: 40x40 ft (12x12 m), 90° wide.
- Condition display and setting feedback via LEDs.
- Combined Fresnel and cylindrical optics provide enhanced detection and false alarm immunity.
- Provides immunity from variation in ambient temperature, acoustic noise, EMI/RFI interference, and pets up to 60 lbs (27 kg)

**Outdoor Infrared Motion Sensor**

- Outdoor weatherproof - high reliability against water and insects
- Registers movement in the area covered: 40 ft (12 m) x 50 ft (15 m) - 120° wide
- Selectable detection patterns: Multi-Level (40 zones) or Pet Alley (18 zones)
- Selectable Sensitivity: High, Mid and Low

**Adaptive Dual Microwave/PIR Motion Detector**

- Registers movement in area covered:
  - 30x35 ft (9.1x10.6 m)
- Condition display and setting feedback via LEDs.
- Provides immunity from variation in ambient temperature, acoustic noise, EMI/RFI interference, and pets/animals.
- 12 sensitivity modes - automatically adjusts to the environment.
- Mounting: Wall or corner, 6 to 10 feet (1.8 to 3 meters).
Motion/Intrusion/Vibration Sensors

**Access Control**

**Fingerprint Access Control System**
- Biometric fingerprint reader with durable and highly accurate optical sensor.
- Selectable 26-bit or 34-bit Wiegand data input and output.
- Audio-visual indicators for acceptance and rejection of valid/invalid fingerprints.
- Stores up to 600 fingerprint templates and 15,000 transactions.
- Built-in serial, USB, and Ethernet ports for RS232/RS485, USB Host, and TCP/IP communication.
- IP65 rated.

**Vandal Resistant & Weatherproof Access Control Digital Keypads**
- Outputs controlled by independent user codes:
  - E-ACK-VWT:
    - Output 1: 5 Amp relay for door strike
    - Output 2 & 3: 1 Amp relay each for other control applications.
  - E-ACK-VWS:
    - Output 1: 5 Amp relay for door strike.
    - Output 2 & 3: 24VDC/100mA sink open collector output for other control applications.
- Normally closed and normally open dry contacts for most relay outputs.
- 34 bit Wiegand data output on user code entry.
- E-ACK-VWS: Door Bell relay output (normally open).

**Electric Strike**
- Fail-Safe Electric Strike (E-EDR-SF)
  - The door is locked with power ON, and unlocked with power OFF.
  - For fire/emergency door or escape door installations.
- Fail-Secure Electric Strike (E-EDR-SCR-P)
  - The door is locked with power OFF, and unlocked with power ON.
  - For entrance door installation.

**Emergency Button & Light Detection**

**Emergency/Panic Button**
- Sends activation signal when button is pressed.
- For normally closed or normally open circuit connections.

**RFID Access Control Keypad with Biometric Fingerprint Reader**
- Outputs controlled by fingerprint reader, user codes and/or EM cards.
- Biometric fingerprint reader with durable and highly accurate optical sensor.
- Quick single touch, one second user recognition.
- Stores up to 500 fingerprint templates, 500 cards and 8 passwords.

**Vandal Resistant & Weatherproof Access Control Digital Keypads**
- Six authentication modes:
  - Mode 1: PW (Only password verification)
  - Mode 2: RF (Only RF Card verification).
  - Mode 3: FP (Only fingerprint verification).
  - Mode 4: FP/PW/RF (fingerprint or password or RF verification).
  - Mode 5: RF and PW (RF and password verification).
  - Mode 6: FP and PW (fingerprint and password verification).

**Access Control Digital Keypad**
- Two relay outputs controlled by two groups of independent user codes.
- Normally closed and normally open dry contacts for both output relays.
- Single lock or inter-lock operation.
- Non-volatile memory
- Duress output.

**RFID EM Cards/Keyfobs**
- Supports additional users for RFID Access Control Keypads.
- Code: 64 bit.
- Function: read only.
- Operating frequency: 125 Khz.
- Modulation: ASK.
- Quantity: 10 cards/keyfobs.
- Compatible with E-FACS, E-ACKR, and E-ACKR-WDB

**Light Intensity Sensor**
- Detects and measures the luminous intensity of light.
- Ideal for monitoring unmanned closets, telecom rooms, remote data rooms, or other low traffic facilities.
- Applications from 0 to 100,000 lux.
- Human eye response (540 nm peak sensitivity).