# SesMo

## **Seismic, Heat & Light Sensors**

Protects bank & media safes, strong rooms, ATMs, vending machines, telephone post, cash dispensers and walls



Build-III
Build-III
Sensors
Sensors

#### General

The SesMo integrates three sensors in one detector with signal processing by an advanced ASIC based electronic chip.

The SesMo is compatible with any security and burglar alarm. SesMo Gas used for gas valves automatic shut off and Elevators cut off (requires testing prior to applying).

The SesMo is incorporates Bimorph (seismic) sensor covering 2.5 - 7 meters/square (depends on the applied material), plus heat and light detectors.

The SesMo Standard is an economical version in ABS case, 12V operating power and relay output.

The SesMo provides fast and easy interfacing for most required application, with three indication LEDs (one LED for each sensor).

Simple DIP Eight Switches Array for performance setting:

Seismic Sensitivity, Seismic Pulse Count, Enable - Disable for each Detection Technology and more settings. Tamper Switch included for detecting cover opening.

#### **Specifications**

Operating Temp: -25 to +80 C°(-13 to 175° F)

Humidity: 80% MTBF: 100,000 Hours

DC Input: 11 to 14V DC

Current: 25 mA @ standby, 50 mA alarm

Detection: Seismic, heat, light Indications: Three colored LEDs

RFI Protection: 30V/m @ 10-1000 MHz

EMI Protection: 50KV @ 1 mS lightning or surge Relay: N.C. mode, solid state, 50 mA @ 12V

Tamper: 500 mA @ 24V (activate when cover removed)

Seismic: Bimorph Piezo

Heat sensor: Semiconductor (min. 75 °C, 167 °F)

Light sensor: Opto Cell (min. 20 Lux)

Enclosure: ABS, Black color Size: W=90, L=85, H=50 mm





## SesMo

### **Seismic, Heat & Light Sensors**

#### **High Risk Application**

The SesMo is one of a kind solution to your high-risk security applications.

The SesMo is suitable to detect the break-in of all types of steel, wood, thin gypsum walls or concrete objects, or for an early warning and alarm warning devices activation (gas & fuel stations, water tanks, etc). In close and dark protected enclosures, the light sensor trig the SesMo before any damage caused (Oxygen or CO2 welding).

Any burglary carried out by means of thermal tools such as oxygen lances are reliably detected by the heat sensor. The detection temperature is  $75 \,^{\circ}\text{C}$  +/- 5%.

The SesMo detects all types of attack caused by explosives, diamond large bit drills and other mechanical tools. Early alarm enables fast intervention by the security services, thus prevents any major damage to the protected object.

The SesMo is used on all known armored safes, ATM, night safes and automatic cash dispensers as well as with all currently known concrete strong rooms. Operation temperature from -30 to +60°C.

#### **Detection Technology**

During burglary attempts, where the break-in is affected by drilling or other mechanical tools, mass acceleration generates oscillations in the protected object material.

The seismic sensor detects these borne noises in a tight and reproducible frequency spectrum so that an optimum differentiation made between the material oscillation signals and unwanted environmental interference. The amplified signals transferred through certain filters and analyzers that verifies the signals, if burglary detected the alarm output is trigger.

#### **SesMo Block Diagram**

# Seismic Section Adjustable Filter Heat Light Bimorph Sensor Amplifier Analyzer Processing

#### **Ordering Details**

SesMo standard, SesMo\_24V (ABS case). Dimensions: 90 X 85 X 50 mm. 3.55 x 3.35 x 2" SesMo NLH (supplied without light & heat sensors. (NLH is not standard. OEM & volume orders) SesMo NLH IP65 (supplied in IP65 sealed ABS box)

SesMo 65 CLR (supplied in IP65 sealed clear ABS box)

SesMo Gas, 12V. (ABS case). Dimensions: 90 X 85 X 50 mm. 3.55 x 3.35 x 2"

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