

GM710

SEISMIC DETECTOR

VANDERBILT



Vanderbilt's powerful GM7xx- series is the result of over 45 years engineering experience in the field of seismic detectors. Our products are specifically designed for round-the-clock monitoring of safes, ATMs, strong rooms or any other environment with high concentration of valuable assets or dangerous goods.

All known types of intruder attacks generate unique vibration patterns. Their characteristic values such as timing, frequency and amplitude are detected and analysed using Vanderbilt's patented Senstec® technology. This technology also ensures that environmental disturbances are ignored, and false alarms eliminated.

The GM710 seismic detector is specifically designed for cost-sensitive applications on steel and reliably detects break in attempts with mechanical and thermal attack tools.

Key Features include:

- 2m operating radius / 12m² coverage area
- For cost-sensitive applications on steel
- High performance Senstec® bimorph sensor for enhanced detection sensitivity
- Advanced micro-controller based digital signal processing
- Distinguishes reliably between real attacks and ambient noise
- Fast installation and adjustable application-specific sensitivity settings
- Small, slim and modern design
- Low power consumption

Detection of:

- Hammers, chisels
- Saws, crowbars
- Sledgehammers
- Concrete grinders
- Diamond-head drills
- Hydraulic pressure tools
- Water-jet cutting tools
- Thermal tools
- Cutting torches
- Oxygen lances
- Explosives

Immunity to:

- Operational noises
- Environmental influences

Applications:

- Safes
- Night deposits
- Ticket machines
- Vending machines



Features & Benefits

■ Reliable detection

Reliable recognition of all known mechanical and thermal attack tools, such as diamond-tipped drills, hydraulic pressure tools, flame cutters, thermal-lances or water jets on safes, automatic teller machines, night deposits, strong rooms and modular vaults made of steel.

■ Comprehensive Range

Vanderbilt's product range offers the right detector for every application, feature and approval requirement. For more information, visit www.vanderbiltindustries.com.

■ Senstec® sensor

The patented Senstec® sensor and digital signal processing detects and evaluates a selected narrow frequency band to ensure reliable detection. This comprehensive protection is immune to environmental influences including air and structure borne noise from external disturbance sources.

■ Decades of experience

Vanderbilt has 45 years of engineering experience in protecting valuables in all aspects of security technology. Large-scale ongoing investment is dedicated to develop solutions and products for the very latest application.

■ International approvals

Compliance with international standards – such as UL, CCC, RCM, PD6662, etc. - is crucial to ensure that security systems are installed professionally and remain reliable.

Recommended Accessories

■ Mounting plate

The use of the GMXP0 mounting plate ensures easy installation and reliable detection performance. It is strongly recommended to use the mounting plate on every Senstec® seismic detector and mandatory for use on uneven steel surfaces.

■ External test transmitter

The GMXS5 remote test transmitter is used to fully test and evaluate an installation with multiple detectors by simulating attack signals. If the seismic detectors are installed at the correct spacing and setting, the test signal is detected and an alarm is triggered.

■ Internal test transmitter

The GMXS1 remote test transmitter is installed directly inside the detector and is used for function and mounting testing of a single seismic detector prior to system arming.

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■ Technical Data

Detection characteristics

- Operating radius / Coverage area on steel
- For all types of tools (including thermal tools) 2m / 12m²

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| Power supply (nom. 12V _{DC}) | V _{CC} = 8V _{DC} ~ 16V _{DC} |
| – Voltage monitoring | Alarm if voltage low |

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| Power consumption (8V _{DC} ~ 16V _{DC}) | I _{typ} = 2.5mA ~ 3.5mA |
| – Quiescent / Alarm | I _{max} = 5mA |

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| Alarm output | |
| – Relay (opens on alarm) | 30V _{DC} / 100mA / R _i < 45Ω |
| – Alarm hold time | ca. 2.5s |

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| Sabotage surveillance, Tamper | |
| – Cover & surface contact | Opens on sabotage |
| – Contact load | 30V _{DC} / 100mA |

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| Test point output | Analogue integration signal |
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| Function test | |
| – For test | Low ≤ 1.5V _{DC} / High ≥ 3.5V _{DC} |
| – Test duration until alarm with GMXS1 | ≤ 3s |
| – Test duration until alarm with GMXS5 | ≤ 90s |

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| Adjustments | |
| – DIP switch setting | 4 fixed DIP settings |

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| Environmental conditions | |
| – Operating temperature | -40°C ~ 70°C |
| – Storage temperature | -40°C ~ 70°C |
| – Air humidity (EN 60721) | < 95%rh, non-condensing |
| – Housing protection (EN 60529, EN 50102) | IP43 |
| – Electromagnetic compatibility (EMC) | EN 50130-4, CFR 47, FCC Part 15:2008 (Class A Digital Device) |

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| Dimensions | 89mm x 89mm x 22mm |
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| Approvals | UL, CCC, RCM, PD6662 |
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■ Ordering Information

Type	Art. No.	Description	Weight*
GM710	V54534-F106-A100	GM710 Seismic detector	0.285kg
GMXP0	VBPZ:2772730001	GMXP0 Mounting plate - GM7xx	0.290kg
GMXC2	VBPZ:5021840001	GMXC2 Connection sleeve (16mm) - GM7xx	0.004kg
GMXS1	VBPZ:4202370001	GMXS1 Internal Test transmitter - GM7xx	0.025kg
GMXS5	VBPZ:5627000001	GMXS5 External Test transmitter - GM7xx	0.363kg
GMAS6	VBPZ:4886060001	GMAS6 Movable mounting kit - GM7xx	0.594kg
GMXP3	VBPZ:3470190001	GMXP3 Lock protection - GM7xx	0.780kg
GMXP3Z	VBPZ:5712410001	GMXP3Z Lock protection - GM7xx	0.823kg
GMXS2	VBPZ:3506110001	GMXS2 2mm Spacer for GMXP3 / GMXP3Z	0.014kg
GMXS4	VBPZ:3506240001	GMXS4 4mm Spacer for GMXP3 / GMXP3Z	0.025kg

* Total weight of the product inclusive of the weight of its accessories and packaging.

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