

# GM775

## 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 GM775 offers the highest degree of security and performance within the GM7xx family of seismic detectors. It is designed for high-risk applications and is suited not only for use on steel and concrete, but also on lightweight synthetic materials.

### Key Features include:

- For applications on steel, concrete and lightweight, synthetic materials
- 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
- Programmable sensitivity levels and response times
- Built-in PC interface for software monitoring and configuration software
- Built-in memory of 100 events
- Electronic alarm output for use with Vanderbilt's Test & indication system
- Small, slim and modern design
- Low power consumption

### Detection of:

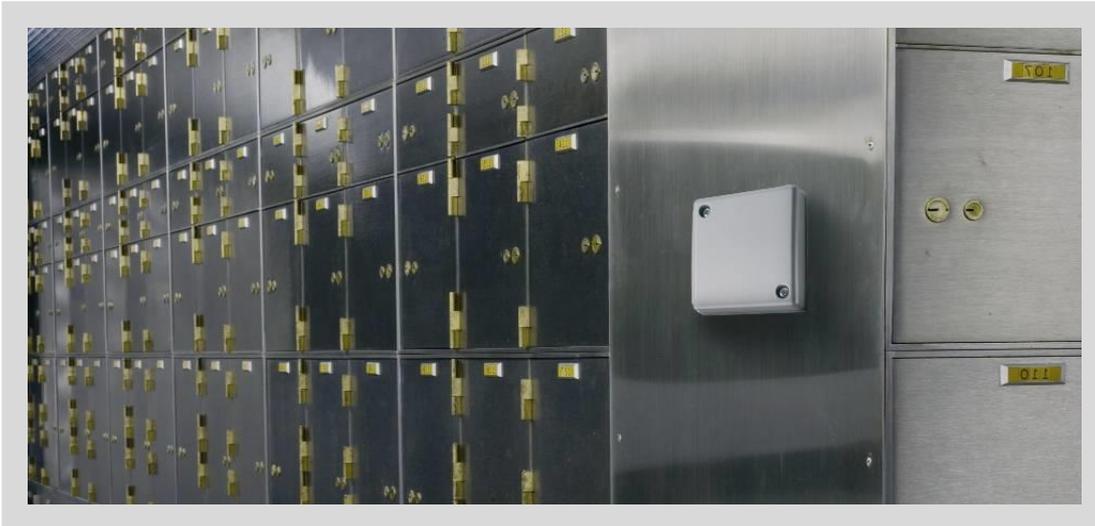
- Hammers, chisels
- Saws, crowbars
- Sledgehammers
- Concrete grinders
- Diamond-head drills
- Hydraulic pressure tools
- Water-jet cutting tools
- Thermal tools
- Cutting torches
- Oxygen lances
- Explosives

### Immunity to:

- Operational noises
- Environmental influences

### Applications:

- Modular vaults
- Vaults with lightweight constructions
- ATMs armoured with synthetic materials
- Safes
- Night deposits



## 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.

### ■ International approvals

Compliance with international standards – such as VdS, VSÖ, FG, SBSC, F&P, NBÜ, MABISZ, etc. - is crucial to ensure that security systems are installed professionally and remain reliable.

### ■ 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.

### ■ Comprehensive Range

Vanderbilt's product range offers the right detector for every application, feature and approval requirement. For more information, visit [www.vanderbiltindustries.com](http://www.vanderbiltindustries.com).

### ■ Electronic alarm output

The GM775 seismic detector features an additional electronic alarm output to be used with Vanderbilt's test & indication system. The GMYA7-AS enables daily routine function tests to be conducted on up to 8 seismic detectors independent of an intruder alarm system.

### ■ 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.

## Recommended Accessories

### ■ SensTool software

SensTool software is used to program seismic detectors beforehand or directly on site. SensTool provides visual imaging of structure-borne sounds derived from mechanical or thermal attack tools and immediately displays the type of the detected alarm.

### ■ 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 and concrete applications.

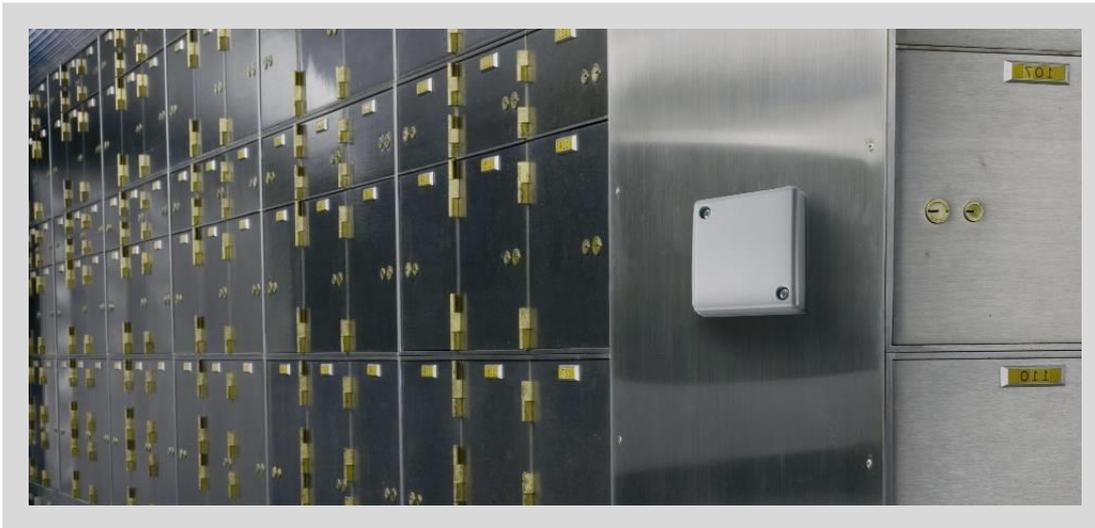
### ■ Internal test transmitter

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	
– Concrete	5m / 80m <sup>2</sup>
– Steel & lightweight synthetic materials	2m / 12m <sup>2</sup>

Power supply (nom. 12V <sub>DC</sub> )	V <sub>CC</sub> = 8V <sub>DC</sub> ~ 16V <sub>DC</sub>
– Voltage monitoring	Alarm if voltage low

Power consumption (8V <sub>DC</sub> ~ 16V <sub>DC</sub> )	I <sub>typ</sub> = 2.5mA ~ 3.5mA
– Quiescent / Alarm	I <sub>max</sub> = 5mA

Alarm output	
– Relay (opens on alarm)	30V <sub>DC</sub> / 100mA / R <sub>i</sub> < 45Ω
– Alarm hold time	ca. 2.5s

Sabotage surveillance, Tamper	
– Cover & surface contact	Opens on sabotage
– Contact load	30V <sub>DC</sub> / 100mA

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

Remote sensitivity reduction input	
– For reduction	Low ≤ 1.5V <sub>DC</sub> / High ≥ 3.5V <sub>DC</sub>
– Reduction to	1/8 of the actual setting

Adjustments	
– DIP switch setting	3 fixed DIP settings
– Via SensTool PC Software	Fully configurable

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

Dimensions	89mm x 89mm x 22mm
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Approvals	VdS, VSÖ, SBSC, F&P, FG, NBÚ, MABISZ, BSI, PD6662
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### ■ Ordering Information

Type	Art. No.	Description	Weight*
GM775	V54534-F109-A100	GM775 Seismic detector	0.285kg
GMSW7	VA5Q00006246	GMSW7 SensTool-SW - GM730/760/775	0.128kg
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
GMYA7-AS	V54534-F101-A100	GMYA7-AS Test & Indication system-GM775	0.800kg
GMYA7-A	V54534-F102-A100	GMYA7-A Alarm indication module - GM775	0.418kg
GMXB0	VBPZ:2772020001	GMXB0 Floor recess box - GM7xx	2.237kg
GMXW0	VBPZ:2771210001	GMXW0 Wall / Ceiling recess box - GM7xx	1.380kg
GMXD7	VA5Q00006245	GMXD7 Anti-drill foil (10x) - GM730/60/75	0.121kg
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
GMXS9	V54534-F110-A100	Seismic Test Tool	0.170Kg

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

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