### 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<sup>®</sup> technology. This technology also ensures that environmental disturbances are ignored, and false alarms eliminated.

The GM760 seismic detector is the all-purpose unit in the Vanderbilt's GM7xx- series. It is perfectly suited for applications on steel, concrete as well as lightweight synthetic materials.

#### Key Features include:

- 5m operating radius / 80m<sup>2</sup> coverage area
- For applications on steel, concrete and lightweight, synthetic materials
- High performance Senstec<sup>®</sup> bimorph sensor for enhanced detection sensitivity
- Advanced micro-crontroller 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
- 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:**

- Vaults
- ATMs armoured with synthetic materials
- Safes
- Night deposits
- Ticket machines
- Vending machines

# GM760

## SEISMIC DETECTOR

# VANDERBILT



## 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 <u>www.vanderbiltindustries.com</u>.

#### Senstec<sup>®</sup> sensor

The patented Senstec<sup>®</sup> 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, NF, IMQ, RCM, INCERT, REQ, NBÚ, PIE, etc. - is crucial to ensure that security systems are installed professionally and remain reliable.

## **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<sup>®</sup> 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.

© Vanderbilt 2016 page 2

# GM760

## SEISMIC DETECTOR

# VANDERBILT



### Technical Data

Detection characteristics – Operating radius / Coverage area on concrete & steel		
<ul> <li>For all types of tools (including thermal tools)</li> </ul>	5m / 80m²	
Power supply (nom. 12V <sub>DC</sub> )	$V_{CC} = 8V_{DC} \sim 16V_{DC}$	
- Voltage monitoring	Alarm if voltage low	
Power consumption (8V <sub>DC</sub> ~ 16V <sub>DC</sub> )	I <sub>tvp</sub> = 2.5mA ~ 3.5mA	
– Quiescent / Alarm	I <sub>max</sub> = 5mA	
Alarm output		
– Relay (opens on alarm)	$30V_{DC}$ / 100mA / R <sub>i</sub> < 45 $\Omega$	
<ul> <li>Alarm hold time</li> </ul>	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	
Function test		
– For test	Low $\leq 1.5 V_{DC}$ / High $\geq 3.5 V_{DC}$	
<ul> <li>Test duration until alarm with GMXS1</li> </ul>	≤ 3s	
<ul> <li>Test duration until alarm with GMXS5</li> </ul>	≤ 90s	
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	
<ul> <li>Electromagnetic compatibility (EMC)</li> </ul>	EN 50130-4, CFR 47, FCC Part 15:2008	
	(Class A Digital Device)	
Dimensions	89mm x 89mm x 22mm	
Approvals	UL, CCC, RCM, CNPP, IMQ, INCERT, REQ, NBÚ, PIE, MABISZ, PD6662	

VANDERBILT

Vanderbilt A6V10245479\_b © Vanderbilt 2016 page 3

# VANDERBILT

#### Ordering Information

Туре	Art. No.	Description	Weight*
GM760	V54534-F108-A100	GM760 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
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

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

Issued by Vanderbilt Intl (IRL) Ltd. Clonshaugh Business & Technology Park D17 KV84 Dublin, Ireland www.vanderbiltindustries.com

© Vanderbilt 2016 Data and design subject to change without notice. Supply subject to availability. Document version: b Edition: 01.01.2016

Vanderbilt A6V10245479\_b © Vanderbilt 2016 page 4 VANDERBILT