

GM780LSN

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.

Even if you have a Local Security Network (LSN), you can take advantage of the protection offered by Vanderbilt's seismic detector range. The GM780LSN is the only watertight seismic detector and can therefore be used in a damp environment without special installation. Optical cover monitoring facilitates remote surveillance and makes your system even safer without requiring manual on-site-control.

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
- Remote-controlled sensitivity levels and response times via LSN
- Three operating modes: LSN classic, LSNi with automatic or manual addressing
- 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

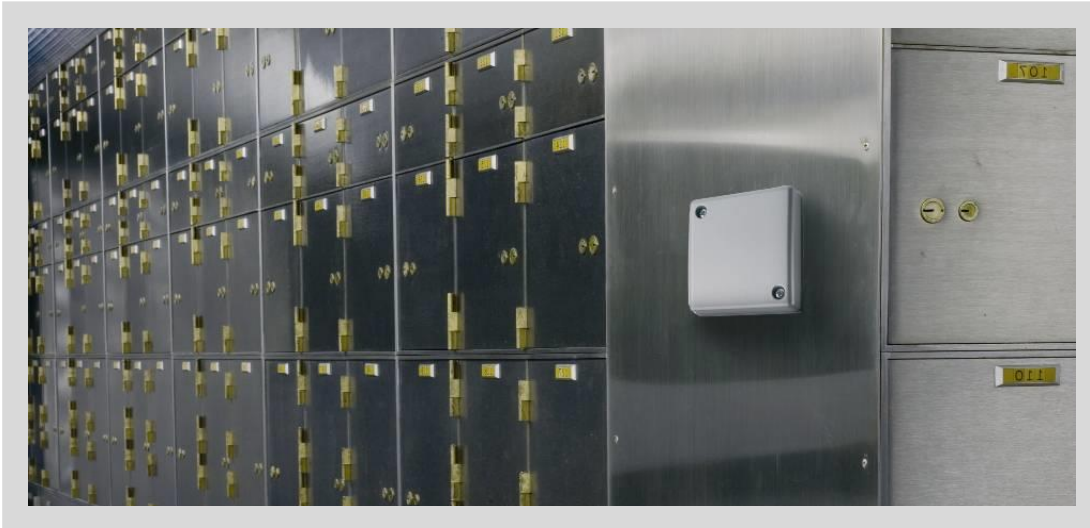
Applications:

- Water treatment works
- External access hatches
- Petrol / gas applications
- Portable cabins / containers
- Chemical plants
- Other extreme environments

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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.

■ Internal test transmitter

The GMXS1 remote test transmitter is installed directly inside the waterproof housing of the GM780LSN and used for function and mounting test of the detector prior to system arming.

■ 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.

■ LSN technology enabled

The GM780LSN is designed to work with LSN Bus technology, which allows the detector and control panel to constantly exchange data. Hereby, the panel identifies, initialises and controls the GM780LSN remotely. This means low-cost installation of the cable network, fast start-up, and easy maintenance.

■ 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

■ 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.

■ External test transmitter

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

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■ Technical Data

Detection characteristics

– Operating radius / Coverage	
– Concrete	4m / 50m ²
– Steel	2m / 12m ²

Power supply	$V_{\max} = 33V_{DC}$
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Power consumption	$I_{typ} = 1.4mA$
– Quiescent / Alarm	$I_{\max} = 1.875mA$

Sabotage surveillance, Tamper	
– Optical cover monitoring	Signals on sabotage

Function test	
– Test duration until alarm with GMXS1	≤ 3s
– Test duration until alarm with GMXS5	≤ 90s

Remote sensitivity reduction input	
– Reduction to	50%, 25% or 12.5% of the original setting

Adjustments	
– Modes selectable via LSNi/LSN control panels	6 fixed modes 1 freely programmable user mode

Environmental conditions	
– Operating temperature	-25°C ~ 70°C
– In water (no formation of ice)	0°C ~ 70°C
– According to VdS environmental class III	-25°C ~ 55°C
– Storage temperature	-50°C ~ 70°C
– Air humidity (EN 60721)	< 95%rh, non-condensing
– Housing protection (EN 60529, EN 50102)	IP67
– Electromagnetic compatibility (EMC)	EN 50130-4

Dimensions	89mm x 89mm x 22mm
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Approvals	VdS Class C, BSI
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■ Ordering Information

Type	Art. No.	Description	Weight*
GM780LSN	V54534-F116-A100	GM780LSN Seismic detector	0.540kg
GMXP0	VBPZ:2772730001	GMXP0 Mounting plate - GM7xx	0.290kg
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
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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