



GRANT DETECTION



HANDHELD DETECTOR MMD01

Grant Detection, s.r.o.
www.grantdetection.com



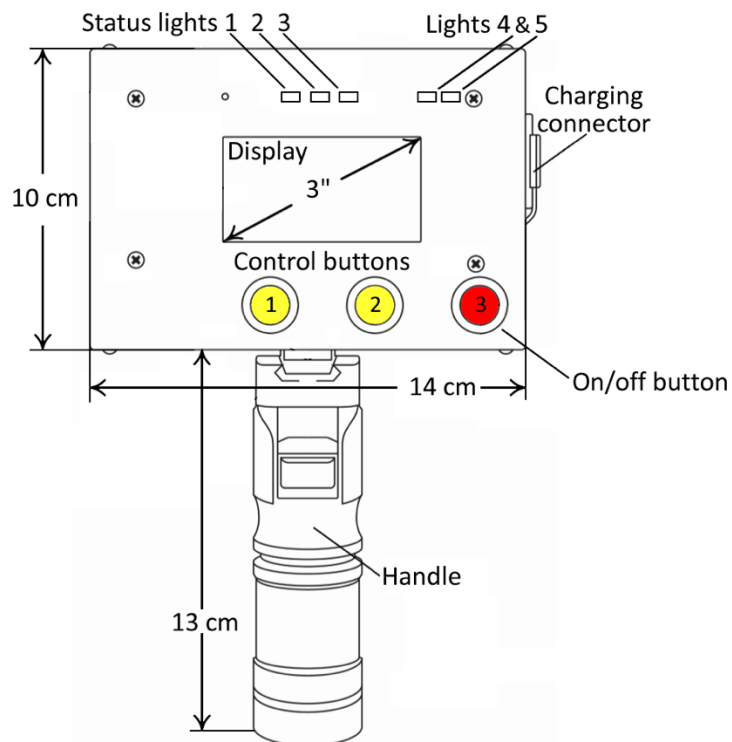
Handheld Detector MMD01

- The handheld detector MMD01 is a portable detector of humans and animals in vehicles.
- The handheld detector MMD01 is mainly intended for national (army, police, customs administration, prison service) and private security forces and logistics companies.
- The handheld detector MMD01 is created to inspect cars and trucks, including containers placed on the vehicles.
- handheld detector MMD01 uses the principle of heartbeat detection.
- The MMD01 is the only fully compact detector on the market. The MMD01 detector contains both a measuring (sensor) and evaluation unit including a display.
- handheld detector MMD01 can be operated by one person.
- The handheld detector MMD01 is easy to operate and measures quickly (20 seconds).
- The handheld detector MMD01 is mobile and can therefore be part of the equipment of any checkpoint or car patrol.
- The handheld detector MMD01 can be used 24/7, as it can be charged by either a standard 230 V outlet or a car socket. The MMD01 detector is powered by rechargeable batteries.
- The handheld detector MMD01 has no negative impact on the environment when in use and does not affect human health.
- The handheld detector MMD01 is a low-power device.
- The handheld detector MMD01 is appropriate for use by national security forces (police, border police, prison service, army, customs administration), as well as private security agencies and logistics companies that need to prevent the illegal movement of people and animals, especially in international transportation.
- The handheld detector MMD01 uses the principle of detecting low mechanical vibrations caused by hemodynamics, without using potentially harmful electromagnetic radiation. The handheld detector MMD01 functions reliably on vehicles where this mechanical vibration is transmitted to the structure. In exceptional cases, such transmission may not occur sufficiently in vehicles of special construction.
- The handheld detector MMD01 can be used to verify the presence of people or animals hidden in vehicles without the need to physically open the vehicle. The handheld detector MMD01 uses one internal sensor and contains no other external components. In case of heartbeat activity detected from the checked vehicle, suggestive symbol (pictogram) is shown on the display of the device. The device is attached to the vehicle using a magnetic system. The device uses advanced algorithms to filter disruptive meteorological and environmental conditions. The internal sensor signal, obtained before and during the measurement, is used to filter out interference so that there is no need to connect an environmental sensor.

Technical specifications

Parameter	Unit	Value
Device dimensions	cm	14 × 22.5 × 5
Portable container dimensions	cm	27 × 25 × 12.4
Device weight	kg	1.3
Weight with portable container	kg	2.5
Diagonal of the display	inches	3
Mean time per measurement	s	20
Input voltage	V	12
Operational temperature range	°C	-40 to 60
Rechargeable battery life	hours	8 to 12
Charging time	hours	approx 2.5
Charger plug	—	CEE 7/16, 12V vehicle jack
IP Protection	—	min. IP33
Operating interface	—	English/German/Spanish

The MMD01 detector has a certificate for temperature testing and for impact resistance MIL-STD-810H.



Detection methodology

All doors must be closed, the engine and other vehicle equipment must be switched off, all persons must exit the vehicle and the vehicle tarpaulin must be secured. The detector shall always be placed on the vehicle structure, as close to the vehicle axle as possible, ideally above or close to the axle wheel. If the vehicle has more than one axle in one place, it is advisable to carry out the detection between the wheels of these axles. Performing fewer detections than recommended for each vehicle type may reduce the reliability of the detection. If the vehicle is equipped with a thicker insulation layer (e.g., polystyrene), the detection reliability may be reduced. Only after the detections made at all recommended locations for each vehicle are negative can it be stated with greater than 95% confidence that no one is hiding in the vehicle.

Trucks (tractors) with semi-trailers, including tankers, open-bodied semi-trailers and semi-trailers carrying passenger vehicles



Place the detector on the chassis structure of the tractor and trailer, see picture, not on the body of the tractor or container. If the tanker is carrying a liquid load, the vehicle must be left stationary for at least 5 minutes before detection.

Trucks with trailer



Place the detector on the chassis structure of the vehicle and trailer, see illustration, not on their bodywork or the container on top of them.

Small trucks



Place the detector on the chassis structure of the vehicle, see picture, not on the body of the vehicle or the container on top of it.

Vans and passenger vehicles



Place the detector on the bodywork above the rear wheel, see picture, ideally on the side of the vehicle where there is no sliding door.

Buses



Place the detector on the vehicle chassis structure, see picture, not on the vehicle body or outer shell. If the vehicle structure does not allow such a detection (e.g. due to lack of access to the chassis), open the storage compartments of the bus and place the detector on the internal structure of the bus, both at the front and at the rear of the bus, ideally in a cross pattern (right at the front and left at the rear or vice versa). If the detector cannot be sufficiently positioned in the luggage compartment close to the axles of the vehicle (within 70 cm of the axles), the detector may alternatively be positioned on the body of the vehicle above both the front and rear wheels.

Refrigerator trucks



Place the detector on the vehicle chassis structure, see picture, not on the vehicle body. It is desirable that the cooling is switched off during detection. If the vehicle's cooling cannot be switched off, detection may be performed, but the reliability of detection may be reduced.

Special vehicles

Place the detector on the vehicle chassis structure, not on the vehicle body or outer shell. Detection must be made above or near all axles of the vehicle. If the vehicle structure does not allow such detection (e.g. due to lack of access to the chassis), open the vehicle's storage compartments and place the detector on the vehicle's internal structure, both at the front and rear of the vehicle, ideally in a cross pattern (right front and left rear or vice versa). If access to

the luggage compartment of the vehicle is not possible, or if the detector cannot be sufficiently positioned in the luggage compartment close to the axles of the vehicle (within 70 cm of the axles), place the detector on other supporting elements of the vehicle, as close as possible to the axles of the vehicle, which must however always be firmly connected to the vehicle structure; alternatively, the detector may be placed on the body of the vehicle above the front and rear wheels. If the vehicle has a special type of chassis (e.g. pneumatic or hydraulic), place the detector on the body of the vehicle above the front and rear wheels.

Grant Detection Quality and Environmental Management: ISO 9001 & ISO 14001 Certifications



Česká společnost pro jakost, z.s.
(Czech Society for Quality)

Management Systems Certification Body No. 3081 accredited
by Český institut pro akreditaci, o.p.s. (Czech Accreditation Institute)
in accordance with ČSN EN ISO/IEC 17021-1:2016
based on the accreditation issues

CERTIFICATE

of compliance of the Quality Management System with the requirements of

ČSN EN ISO 9001:2016
to company

Grant Detection s.r.o.
Limited liability company
Holšická 1130, Újezd nad Lesy, 190 16 Prague 9, Czech Republic
Company Identification Number: 06928889

Scope:
**Production and sale of detectors
of people and animals in vehicles**

Certificate registration number: 100000481/QMS/2024
Date of the first certification: 19.08.2024
Certification validity: 19.08.2024 – 18.08.2027
Certificate valid from: 19.08.2024
Head of the Management Systems Certification Centre:
Ilona Ježková



The certified company is subject to surveillance by Česká společnost pro jakost, z.s. (Czech Society for Quality). In the case of finding system nonconformity with requirements of ČSN EN ISO 9001:2016 the certificate effectiveness may be suspended or cancelled.
This is a translation. In case there is a dispute concerning the interpretation the original version of the certificate in the Czech language shall prevail.
Place of issue: Novotného lávka 200/5, Staré Město, 110 00 Praha



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Graphical presentation

Handheld detector MMD01



Handheld detector MMD01 in durable case including accessories



Handheld detector MMD01 detector during detection



One button, one result.

Seeing more means knowing more.

We have presented the MMD01 detector to armed forces in more than 30 EU countries and have successfully tested the MMD01 detector with over 20 armed forces across Europe. Our clients include Frontex - European Border and Coast Guard Agency, German Bundespolizei, Bavarian Border Police, Czech Police, Czech Prison Service, and the Austrian Border Police. Previously, our detector was awarded by the European agency FRONTEX as one of the most innovative solutions that could aid in protecting the Schengen borders. We have concluded a framework contract with Frontex for the supply of MMD01 detectors for a period of up to 4 years. Moreover, we have online references from the German Border Police, which include videos showcasing their satisfaction with our detector, featuring the Bavarian Minister of the Interior and the German Secretary of the Ministry of the Interior with our device.

Along with border patrols, other police departments can exploit the MMD01 detector to measure the presence of illegal immigrants in vehicles parked or passing through any inland area. The detector is also designed to protect critical state infrastructure objects such as power plants or airports. Furthermore, it is advisable for Customs administration to use the MMD01 detector when inspecting a truck as pre-screening, specifically before using large capacity mobile X-ray machines. This will prevent unintentional harm to the person hiding inside the vehicle. The MMD01 handheld detector enables the law enforcement agencies to completely change their strategy in detecting illegal migration and is the most innovative detector on the worldwide market.



We are ready to visit you and introduce the MMD01 detector.

We also offer the possibility to test the MMD01 detector with your units in real operation.

www.grantdetection.com

info@grantdetection.com

An instructional video is available on the website www.grantdetection.com

