ASTM D7953 approved

SENSOR DDS[®] MIT

Dry Geomembrane Mobile Integrity Arc Tester

SENSOR

www.sensorgroup.com

SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester M30 0ET, England

Tel: +44 16 18 500 926 ster Email: office_uk@sensorgroup.com Web: www.sensorgroup.com

Introduction



SENSOR s.r.o. was established in 1990 and since then has become the world's leader in leak detection systems. With over 23 year's existence, Sensor has developed high quality products under the registered trademark SENSOR DDS[®]. From its base in Slovakia Sensor s.r.o. has established subsidiary companies in:

- Germany
- United Kingdom
- Chile
- Czech Republic
- Russian Federation

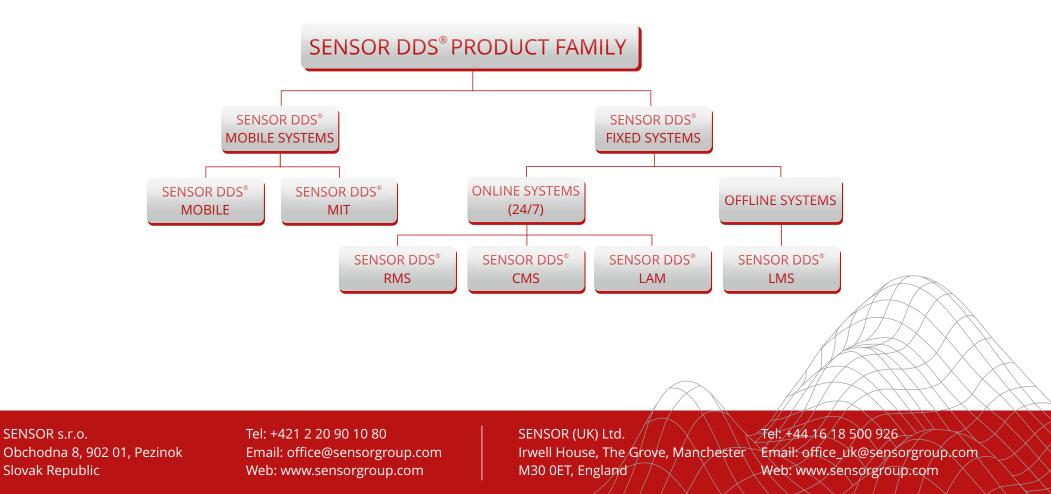
At the present, Sensor is active in more than 45 countries and has applied its systems on more than 1150 projects. Sensor's electronic leak location and detection technology has been used successfully to monitor and protect in excess of 19 million square meters of geomembrane liners.

SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester Email: of M30 0ET, England Web: ww

Tel: +44 16 18 500 926 nester Email: office_uk@sensorgroup.com Web: www.sensorgroup.com

SENSOR DDS[®] Product Family

SENSOR DDS[®] is the trademark for the family of monitoring systems created by Sensor s.r.o. to locate leaks. These systems are split into two broad sub-categories, FIXED and MOBILE. Further sub-divisions can be seen on the chart below.





SENSOR DDS[®] MIT Technology

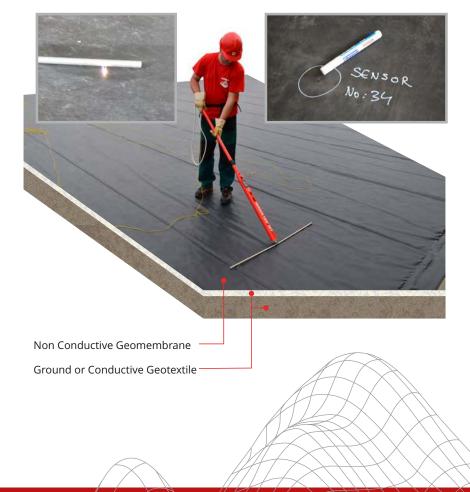
SENSOR DDS[®] MIT technology was developed specifically for the quality control of exposed geomembrane liners such as synthetic membranes / liners, or asphalt.

Even where the damage is less than 1mm² the equipment will generate an audio visual alarm to warn the operator that damage has been encountered.

It is employed directly after the installation of a liner. The system electronically verifies the integrity of the entire surface including welds. This enables you to find all defects (e.g. caused by installation, manipulation, transit, or following trades) down to invisible pinhole sized damage.

SENSOR DDS[®] MIT can also be used in double lining systems where conductive-backed geomembrane can be added as a solution for testing the upper geomembrane or in case of two non-conductive geomembrane system, conductive geotextile must be installed as a middle layer.

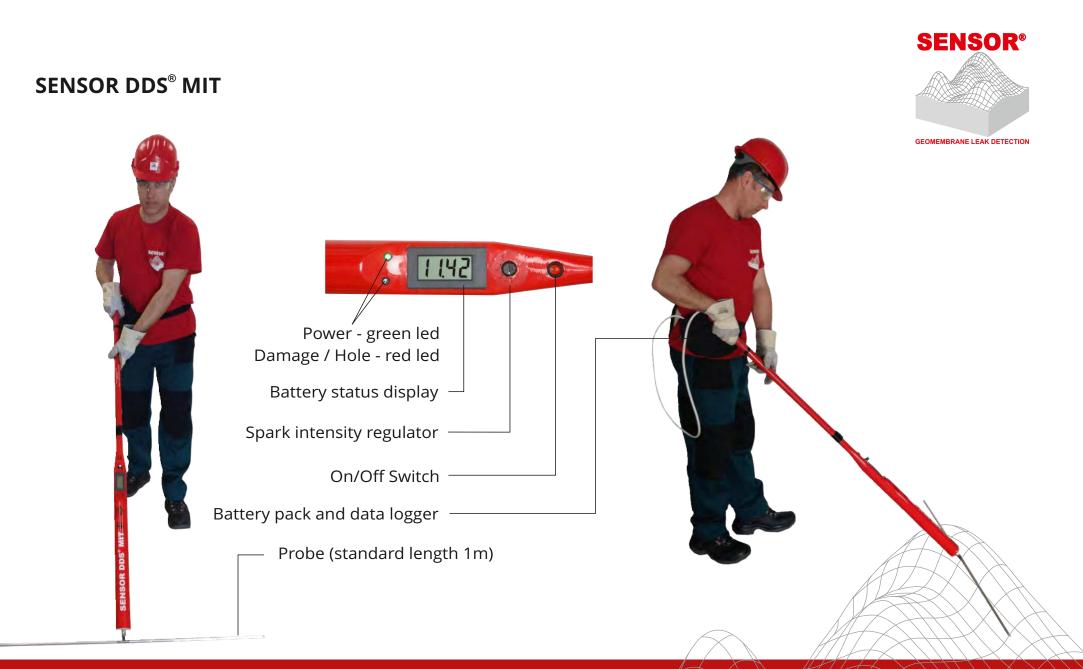




SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic

Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester M30 0ET, England

Tel: +44 16 18 500 926 ester Email: office_uk@sensorgroup.com Web: www.sensorgroup.com



SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester Em M30 0ET, England We

Tel: +44 16 18 500 926 Dester Email: office_uk@sensorgroup.com Web: www.sensorgroup.com

Technical Specification

- Adjustable output voltage range: 6-30kV DC
- Variable sensitivity: 0-3 mA
- Maximum continuous current: <3mA
- Operating time on full battery: min 16 hours
- Meter accuracy: +/- 1%
- Mains voltage for charging: 110 to 240V AC, 50/60 Hz
- Weight (unit only): 1.2 3.2kg (2.6 7lbs) depends on the model
- Dimensions (unit only): 159cm length x 6cm deep
- Packed Weight: 15kg
- Dimensions (packed): 100cm x 41cm x 15.5cm
- Battery: 12V, 4.5Ah or 7.2Ah





Note: Due to ongoing technical developments, all stated information is typical and is subject to change without notice or obligation

SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester Email: offi M30 0ET, England Web: www

Tel: +44 16 18 500 926 ster Email: office_uk@sensorgroup.com Web: www.sensorgroup.com

SENSOR DDS[®] MIT vs Common Water Based Detection Method



SENSOR DDS[®] MIT

- Doesn't require water to operate, SENSOR DDS[®] MIT can be applied on a completely dry surface (small non conductive residuals could be present)
- One operator can test up to 6000m² per day depending on site conditions. For large areas, multiple units can be used. Zero interference between units means multiple operators can work simultaneously so your project will never be late
- Can detect pinholes
- Easy of use. Audio and visual alarm warns operator when hole is detected. No training is required
- SENSOR DDS[®] MIT system weighs only 3kg and that's all what operator will carry during survey
- SENSOR DDS[®] MIT is a much quicker method than any based methods means also that is more cost effective

Water based detection method

- Works only with the supply of a large amount of water
- This method is very time consuming, setting up many metres of hose and lances in addition to the electrical testing equipment used
- Unable to detect very small damage less than 1mm² in size
- Operator has to receive expensive training
- Operator has to carry heavy equipment. Water hoses require setting up for each lane
- Comparatively expensive system needs multiple operatives to set up and test.
- Remote locations without water supplies mean that water has to be transported in

SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester M30 0ET, England

fel: +44 16 18 500 926 chester Email: office_uk@sensorgroup.com Web: www.sensorgroup.com

Certificates





In respect to continually growing requirements in both home and foreign markets, our company acknowledges its responsibility for managing and ensuring quality and protecting the environment, as well as for protecting the health of its employees while they work. The mutual effect of these elements resulted in the company's management system receiving ISO 9001:2008 certification issued by SGS.

CE

SENSOR DDS MIT complies with all enforceable EU standards, norms and regulations (High voltage directives, Electromagnetic compatibility, Environment etc.)

SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester Email M30 0ET, England Web:

fel: +44 16 18 500 926 hester Email: office_uk@sensorgroup.com Web: www.sensorgroup.com



SENSOR DDS[®] MIT Models



LENGTH1.5m1.5m1.5-4.5m (adjustable)EFFECTIVE WEIGHT1.2kg2kg3.2kgAUDIO VISUAL ALARM★✓✓VOLUME REGULATOR★✓✓BATTERY STATUS DISPLAYBACKPACKON BODYON BODYINTENSITY REGULATORBACKPACKON REQUESTON REQUEST	MODEL	SENSOR DDS [®] MIT LT (LIGHT VERSION)	SENSOR DDS [®] MIT	SENSOR DDS [®] MIT XL (EXTENDED VERSION)
AUDIO VISUAL ALARMXImage: Constraint of the constr	LENGTH	1.5m	1.5m	1.5-4.5m (adjustable)
VOLUME REGULATORXImage: Constraint of the sector of	EFFECTIVE WEIGHT	1.2kg	2kg	3.2kg
BATTERY STATUS DISPLAY BACKPACK ON BODY INTENSITY REGULATOR BACKPACK ON BODY	AUDIO VISUAL ALARM	×	\checkmark	\checkmark
INTENSITY REGULATOR BACKPACK ON BODY ON BODY	VOLUME REGULATOR	×	\checkmark	\checkmark
	BATTERY STATUS DISPLAY	ВАСКРАСК	ON BODY	ON BODY
PRICE ON REQUEST ON REQUEST ON REQUEST	INTENSITY REGULATOR	ВАСКРАСК	ON BODY	ON BODY
	PRICE	ON REQUEST	ON REQUEST	ON REQUEST

This equipment is also available in different color variations

SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester Email: office_uk@sensorgroup.com M30 0ET, England Web: www.sensorgroup.com

Contacts



SENSOR s.r.o.

Obchodna 8 902 01, Pezinok Slovak Republic Tel: +421 2 20 901 080 Email: office@sensorgroup.com

SENSOR (UK) Ltd.

Irwell House, The Grove Manchester, M30 0ET England Tel: +44 16 18 500 926 Email: office_uk@sensorgroup.com

SENSOR DKS GmbH. Torstraße 1 D-23570, Lübeck Germany Tel: +49 45 02 999 300 Email: office_de@sensorgroup.com

SENSOR LA S.A. Calle Renca 2210 Renca, Santiago Chile Tel: +56 9 98 712 816 Email: office_cl@sensorgroup.com

For more information please visit our website www.sensorgroup.com

SENSOR s.r.o. Obchodna 8, 902 01, Pezinok Slovak Republic Tel: +421 2 20 90 10 80 Email: office@sensorgroup.com Web: www.sensorgroup.com SENSOR (UK) Ltd. Irwell House, The Grove, Manchester Email: 6 M30 0ET, England Web: w

fel: +44 16 18 500 926 nester Email: office_uk@sensorgroup.com Web: www.sensorgroup.com