

PRODUCT OVERVIEW

MRI



RF TEST



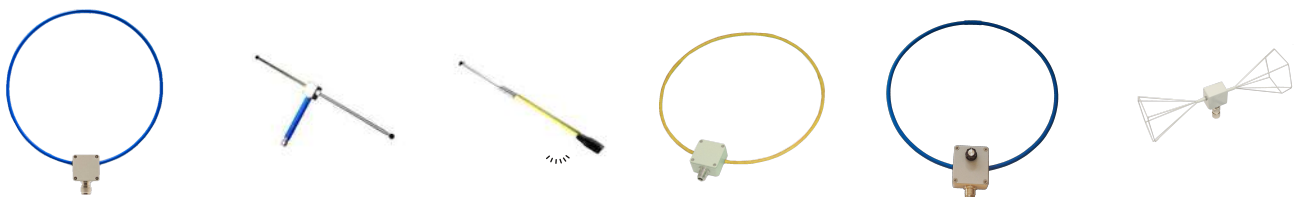
EMF



EMI-EMC



ANTENNAS



TRIPODS AND SUPPORTS



OAS-S (Optical Alarm System - Smoke)



OPTIONS: 40m fiber optic, OAS-CU5

FOR MORE INFORMATION: datasheet, manual

The OAS-S is an optical alarm system for smoke detection, to be mounted in proximity of the toroid of the magnetic resonance imaging. The OAS will eventually report the alarm through a light signal. Thanks to its external fiber optic connection and its battery supply, the OAS does not affect in any way the artifact of the MRI.



OAS-CU (Optical Alarm System - Control Unit 1 Sensor)



FOR MORE INFORMATION: datasheet, manual

The OAS control unit allows the management of the alarm signals sent from the detector. Through the digital acquisition, from the fiber optic of the OAS it is possible to manage the alarm signal, the system error signal and the low battery signal, both visually (two LEDs of different colors) and acoustically (buzzer). The control unit provides three relays digital output, in order to allow its integration with more complex electric systems.



OAS-TH (Optical Alarm System - Temperature and Humidity)



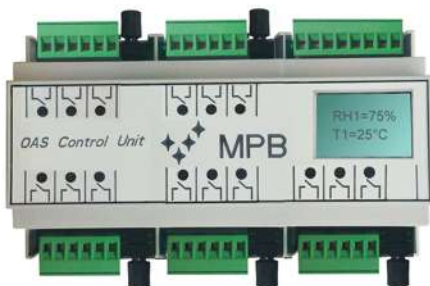
OPTIONS: 40m fiber optic, OAS-CU5

FOR MORE INFORMATION: datasheet, manual

The OAS-TH is an optical alarm system for temperature and humidity detection, to be mounted in proximity of the toroid of the magnetic resonance imaging. Thanks to its external fiber optic connection and its battery supply, the OAS does not affect in any way the artifact of the MRI.



OAS-CU5 (Optical Alarm System - Control Unit 5 Sensors)



FOR MORE INFORMATION: datasheet, manual

The OAS 5-inputs is a control unit developed to connect, through an optical link, several sensors such as smoke detectors, temperature and humidity detectors, and many more.

This control unit is the ideal solution for the magnetic resonance imaging. The OAS will eventually report the alarm through a light and acoustic signal. Thanks to its external fiber optic connection, the OAS does not affect in any way the artifact of the MRI.



SEMS (Shielding Effectiveness Measurement System)



FREQUENCY RANGE: from 10 kHz to 300 MHz

OPTIONS: antennas, CALKIT, NMR-01, Optic link

FOR MORE INFORMATION: datasheet, manual, video

The SEMS has been conceived and designed to meet the growing test requirements of shielding effectiveness for shielded environments in hospitals and other environments, such as EMI-EMC chambers, military and civil shelters for telecommunications. The SEMS allows automatic and reliable measurements and rapidly determines the reduction value of the magnetic and the electric field in shielded environments.



SEMS-LIGHT (Shielding Effectiveness Measurement System)



FREQUENCY RANGE: from 10 kHz to 128 MHz

OPTIONS: antennas, CALKIT, NMR-01, Optic link

FOR MORE INFORMATION: datasheet, manual, video

SEMS LIGHT is the right solution for your test requirements of SE in hospitals and many other applications such as EMI-EMC chamber, military and civil shelter for TLC. Easy to use thanks to the list of frequencies programmable from the operator in the range 10 kHz - 128 MHz.

It is possible to upgrade the functionality up to 300 MHz through the software key option. A wide range of antennas is available to cover all measuring needs (e.g. rod, biconical, dipole, loop).



CCM (Contact Current Meter)



FREQUENCY RANGE: from 40 Hz to 110 MHz

OPTIONS: calibration Jig (CCM JIG)

FOR MORE INFORMATION: datasheet, manual, video

The CCM allows the measurement of the contact current flowing through the human body, as it makes contact with a conductive object charged by an EM field. This instrument can verify the compliance to the limits for the exposition to contact current for workers and general public, shown on the ICNIRP guidelines and compliant with the directive of the European Parliament 2013/35/EU of 26/06/2013. The display indication provides the value of the current in mA and the percentage of the value compared to the standard.



URM (Universal Reference Magnet)



FREQUENCY RANGE: up to 1 Tesla

The universal reference magnet URM, allows calibrating any type of hall sensors: isotropic, non-isotropic, transverse and axial up to 1 Tesla. Adjustable height so the field is function of the distance from the magnets.



PM50, PM50D, PM50D20 (Personal Monitor)



FREQUENCY RANGE: from 10 Hz to 30 KHz

FOR MORE INFORMATION: datasheet, manual

PM50 devices allow monitoring and protecting workers from the risk of exceeding the exposition threshold for low frequency magnetic fields, through their positioning on the limbs, on the trunk and on the waist.



SEP (Selective Electric Isotropic Triaxial Antenna)



FREQUENCY RANGE: from 100 KHz to 3.6 GHz

OPTIONS: rugged pc, Wi-Fi or bluetooth link connection, NMR-01 non-magnetic and non-reflective tripod

FOR MORE INFORMATION: datasheet, manual, video

The SEP selectively monitors the electric field, allowing automatic accurate measurements, in a very wide range, in real time and with minimum effort, due to its small size. His three high sensitivity axes allow to cover different applications, such as workers exposure in broadcasting, telecommunication and industrial sectors. It is also possible to perform altitude measurements through a drone.



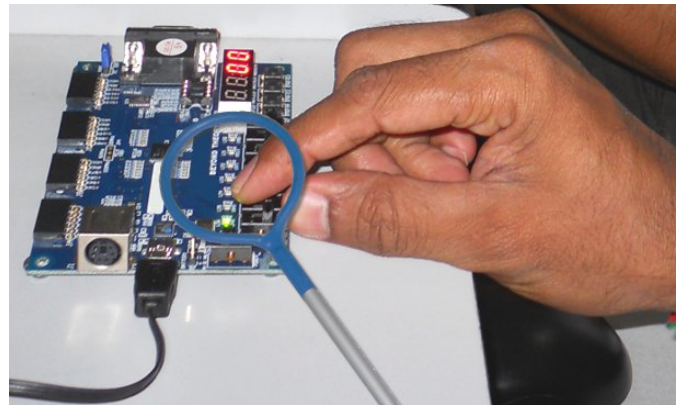
L-3 (Sniffer)



FREQUENCY RANGE: from 10 kHz to 300 MHz (1 GHz)

FOR MORE INFORMATION: datasheet

The L-3 provides measurements for RF leaks and near the signal source. This antenna has the sensitivity for magnetic field emissions.



MSA210 (Vand Der Hoofden Sphere)

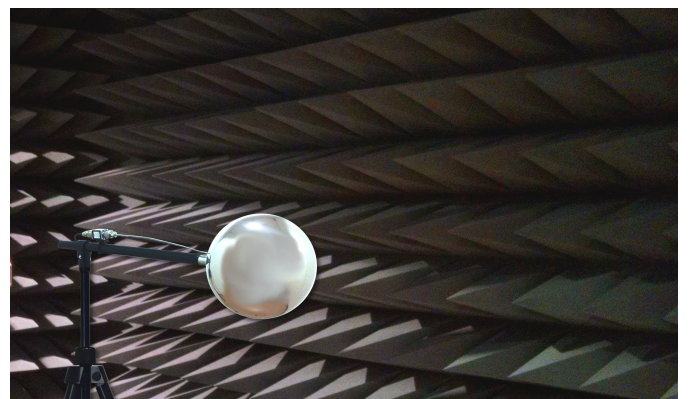


FREQUENCY RANGE: from 20 kHz to 10 MHz

OPTIONS: NMR-01, P-0007

FOR MORE INFORMATION: datasheet, manual

MSA-210 "Van Der Hoofden Test Head" allows measuring human exposure to electromagnetic field radiations emitted from lighting appliances with power supplies that work on high frequencies. The method used to measure the induced current density complies with IEC62493. This test head has to be connected to the EMI receiver through a protection network. The software supplied allows to analyze the peak values for the verification of the "F factor" limits compliance.



TEM-01 (Transverse Electromagnetic)

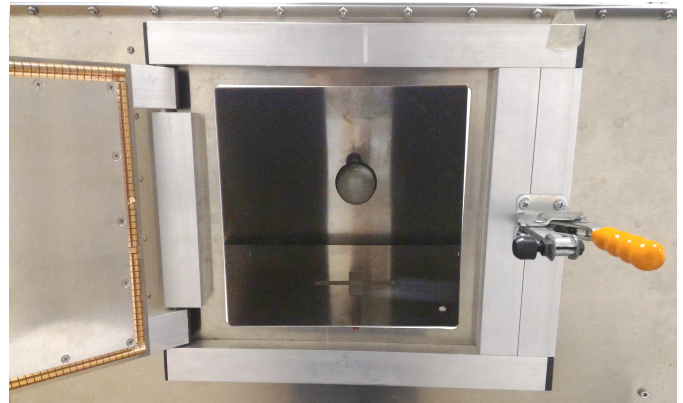


FREQUENCY RANGE: from DC to 300 MHz

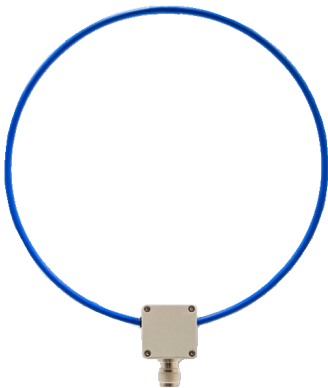
OPTIONS: Technical panel with RF connectors and power/signal filters

FOR MORE INFORMATION: datasheet

Compact and easily transportable, this TEM cell is the right alternative to the Open Area Test Site (OATS) and to the anechoic chamber. It is built wholly in aluminium to guarantee lightness and long-term duration without any oxidation and allows to measure the emission from the EUT or to generate the electromagnetic field required in compliance to the EN 61000-4-3 standard.



L-1 (Loop Antenna)



FREQUENCY RANGE: from 2 MHz to 128 MHz

FOR MORE INFORMATION: datasheet

The L-1 is a magnetic field antenna for HF and VHF measurements.

This antenna allows testing the magnetic field shielding and the spectrum monitoring below 128 MHz.

The L-1 pattern is omnidirectional.



D-2 (Dipole Antenna)



FREQUENCY RANGE: from 40 MHz to 300 MHz

FOR MORE INFORMATION: datasheet, manual

The D-2 is an electric field antenna for VHF measurements with tunable elements. This antenna allows testing the electric field shielding (especially where high dynamic values are required) and EMC emissions. The pattern is omnidirectional.



R-2 (Rod Antenna)



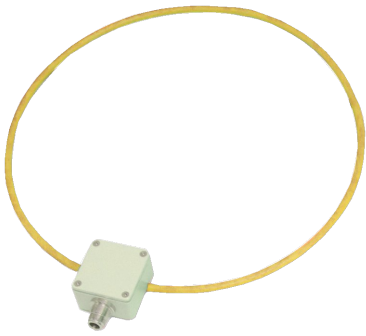
FREQUENCY RANGE: from 1 MHz to 128 MHz

FOR MORE INFORMATION: datasheet

The R-2 is an electric field antenna for MF, HF and VHF measurements. This antenna allows testing the electric field shielding and the spectrum monitoring below 128 MHz. The R-2 pattern is omnidirectional.



L-2 (Loop Antenna)



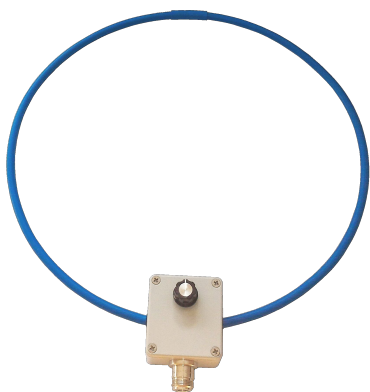
FREQUENCY RANGE: from 10 kHz to 4 MHz

FOR MORE INFORMATION: [datasheet](#)

The L-2 is a magnetic field antenna for VLF, LF and MF measurements.
This antenna allows testing the magnetic field shielding and the spectrum monitoring below 4 MHz.
The L-2 pattern is omnidirectional.



L-4 (Tuned Loop Antenna)



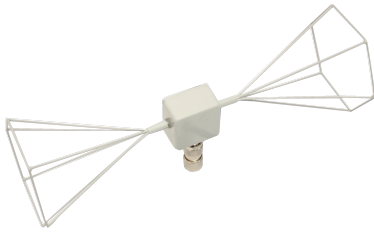
FREQUENCY RANGE: from 2 MHz to 128 MHz

FOR MORE INFORMATION: [datasheet](#)

The L4 is a passive tuned loop antenna for the magnetic component of the electromagnetic field. It allows standard wide band measurements or selective measurements, by tuning the antenna on one of the five preset frequencies.
This antenna is ideal for measuring the magnetic field in different types of MRI (0.3 T, 0.5 T, 1 T, 1.5 T) and for shielding effectiveness measurements.



B-1 (Biconical Antenna)



FREQUENCY RANGE: from 60 MHz to 300 MHz

FOR MORE INFORMATION: datasheet

The B-1 is an electric field antenna for VHF measurements.

This antenna allows testing the electric field shielding, the spectrum monitoring below 300 MHz and EMC emissions, where very small space testing zone are present.

The B-1 pattern is omnidirectional.



NMR-01 (Non Magnetic and Reflective Tripod)



MATERIAL: Fiberglass, DELRIN and PEEK

OPTIONS: NMR-BLK, NMR-ARJ, NMR-UNI

FOR MORE INFORMATION: datasheet

The "non-magnetic and non-reflective" tripod NMR-01 allows placing antennas and measuring instruments in every environment with no problem of interference, reflection, magnetic attraction or wet. The tripod is built with non-metallic material, in order to be usable in anechoic chambers and MRI. The NMR-01 is solid, suitable for all environments, extendable up to 2 m, lightweight and easy to carry. All these characteristics make it a greatly innovative tripod for EMI-EMC, RF and EMF measurements.



NMR-ARJ (Joint for Tripods)



MATERIAL: DELRIN

FOR MORE INFORMATION: datasheet

Delrin-made positioner, compatible with all the $\frac{1}{4}$ " insert tripods. It allows the MPB fast connection, facilitating and fastening the grafting of the meter on the tripod, both in vertical and horizontal configurations, allowing both horizontal and vertical polarizations.



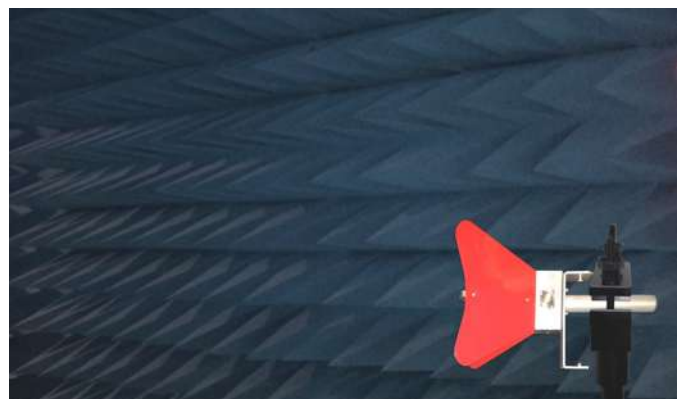
NMR-BLK (Block for Antennas)



MATERIAL: DELRIN and Nylon

FOR MORE INFORMATION: datasheet

Completely Delrin and nylon-made block to allow the fixing of several antenna types. Thanks to its features, including the possibility to flip the lock bracket, both the vertical and the horizontal polarizations are allowed. Also, the $\frac{1}{4}$ " threading makes it compatible with the most of the tripod models.



NMR-UNI (Universal support)



MATERIAL: DELRIN, steel

FOR MORE INFORMATION: datasheet

This instrument with the ¼ " insert is the adapter between the classic photographic threading and the MPB NMR-01 threading. Thanks to this support, combined with the NMR-ARJ, it is possible to use the fast connection, fastening the positioning and the support of the measuring instrument.



NMR-CUBE (Modular Framework)

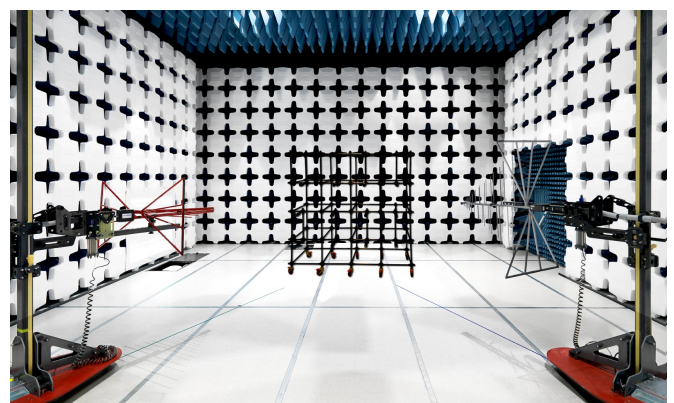


MATERIAL: DELRIN, fiberglass and PVC

OPTIONS: NMR-ARJ, NMR-BLK, accessories

FOR MORE INFORMATION: datasheet

The NMR-cube is a modular, adjustable, expandable and robust framework, for the support of sensors and antennas in environments where no metallic or reflective materials are allowed. Entirely made of fiberglass tubes, with PVC junctions and DELRIN supports, this non-magnetic and non-reflective system, does not affect the measurement of the emitted field.





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