

OAS-S

OPTICAL ALARM SYSTEM - SMOKE

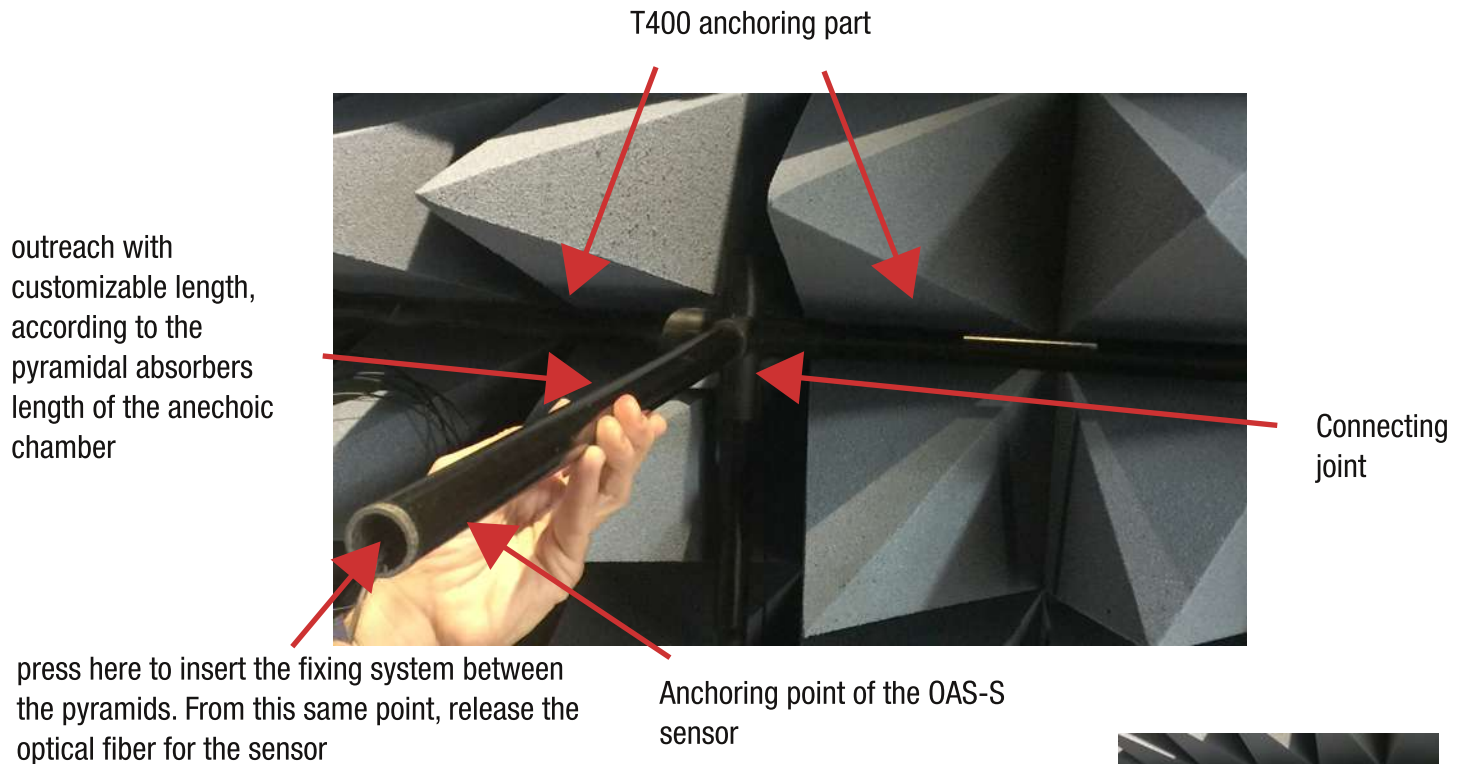


The OAS-S is an optical alarm system for smoke detection, to be mounted in an anechoic chamber or in proximity of the toroid of the magnetic resonance imaging. The OAS will eventually report the alarm through a light signal. Thanks to its external fiber optic connection and its battery supply, the OAS-S has no emissions of any kind so both the resonance artifact and the anechoic chamber measurement are not affected.

ANECHOIC CHAMBER INSTALLATION

The installation of the OAS-S in an anechoic chamber is extremely fast and simple.

The fixing system allows placing the smoke sensor into your anechoic chamber without breaking/removing the pyramidal absorbers or damaging the shielding.

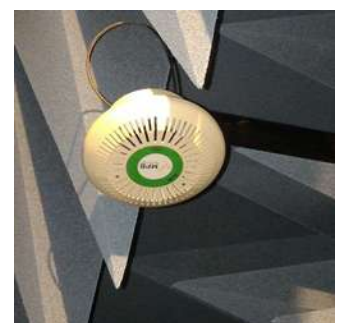


Insert the OAS-S anchoring system between the chamber pyramids down to their bottom, pushing on the front tube

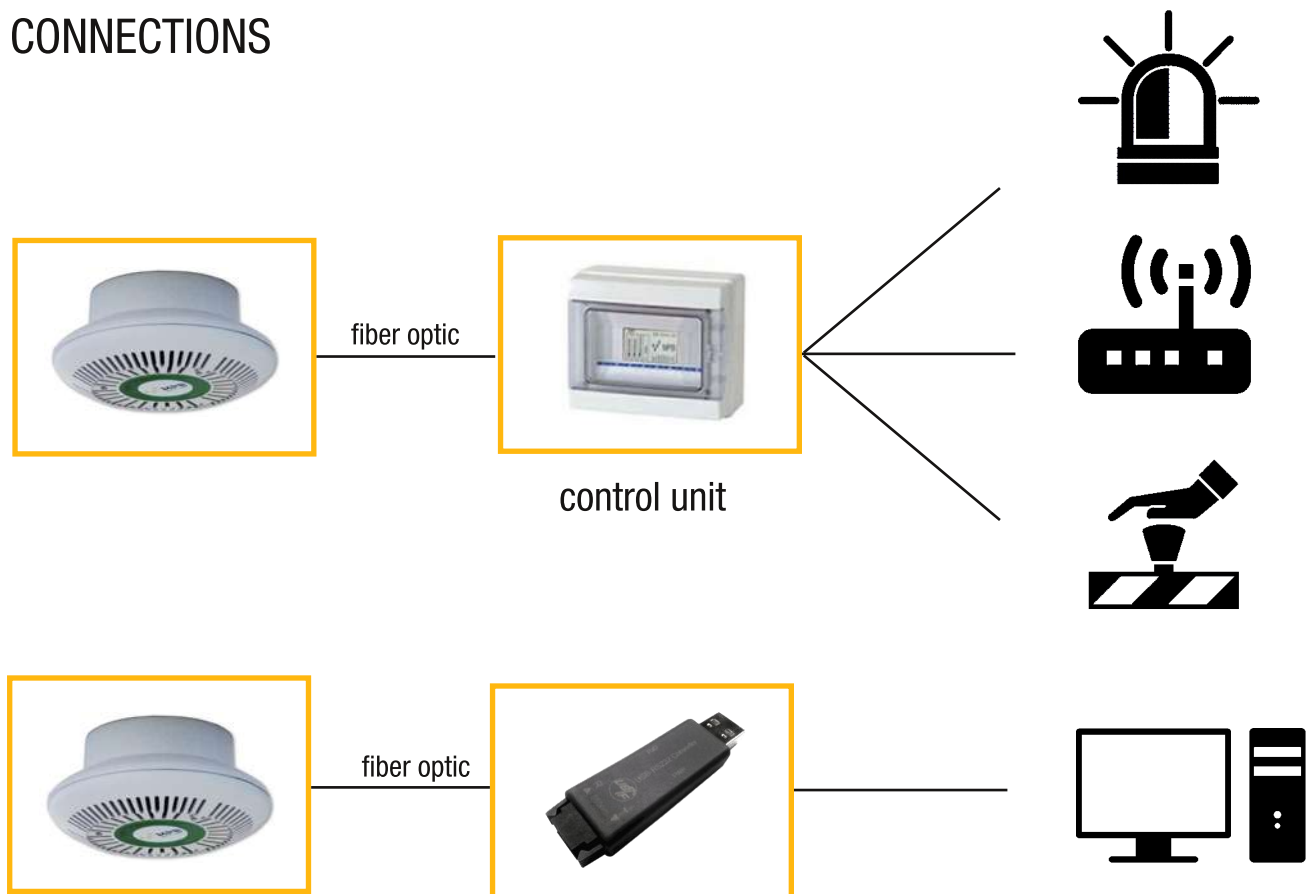


Anchor the sensor to the outreach, connecting the fiber optic

Insert the batteries, hook the connector from the top of the sensor and screw the top of the OAS-S. Perform the test alarm procedure



CONNECTIONS



MRI INSTALLATION

The installation of the OAS-S in MRI requires fixing the smoke sensor to the wall or to the false ceiling panels in proximity or above the toroid with two plugs



Drill the box where it is set up and anchor it in the desired position by means of the plugs

Insert the batteries, connect the OAS-S top and perform the alarm test procedure



BATTERY REPLACEMENT

The replacement of the OAS-S batteries does not imply removing the sensor from the ceiling, so it does not require technical personnel



Unscrew the top of the sensor and, after removing the battery lock, replace the batteries.
Screw the upper part of the sensor

STANDARD CONFIGURATION

- OAS-S detector
- OAS Control Unit
- 2 batteries
- 15 m fiber optic
- User manual

OPTIONS

- OAS-Control Unit 5 channels
- USB optical converter
- Fiber optic - customizable length
- Switchboard with power supply and button (to reset the alarm)
- Support for anechoic chamber

OAS-S TECHNICAL SPECIFICATIONS

Sensing element	Electro-optical infrared
Sensing element test	Electro-optical element self-test
Sampling interval of smoke	43 sec (typ.)
Test button	Alarm condition simulation
Light signal	Red LED reports: -Every 43 sec, sampling of smoke presence -In case of alarm, light signal every 0,5 sec (Typ.)
Connections	Unidirectional fiber optic with ASCII serial protocol
Reporting	Alarm – transmitted after smoke detection Status – contains battery voltage and is transmitted every 10 sec
Power Supply	2 batteries
Battery-Life	Over 6 months (with 2x Panasonic BR-AG 1.8 Ah MRI compliant) customizable battery life upon request
Dimensions	Diameter 110 mm, height 50 mm

Subject to change without notice



OAS CONTROL UNIT

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-S 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.

CONTROL UNIT TECHNICAL SPECIFICATIONS

Remote signaling	<p>Normally close contact max 2 A; 62.5 VA for:</p> <ul style="list-style-type: none"> - Alarm (contact normally closed) - Error (contact normally closed) - Low batteries (contact normally closed) - Reserved for future expansion (contact normally open) <p>0..1 Vdc analog outputs max 10 mA</p> <ul style="list-style-type: none"> - 2 analog outputs for future expansion with a variable value between 0 and 1 Vdc
Local signaling	<p>LED indication:</p> <ul style="list-style-type: none"> - Red - Alarm - Yellow - Error - Blue – Low Batteries <p>buzzer 95 dB_A</p> <ul style="list-style-type: none"> - Continuous beeping to signal the alarm - Intermittent beeping to signal error or low batteries
Digital input	Alarm Reset through microswitch or external button (opt)
Connection	<ul style="list-style-type: none"> - Unidirectional optical fiber with ASCII serial protocol to the detector - 1 fiber optic input (further optional input channels available) - USB for FW update
Power supply	<p>12..24 Vdc max 1A</p> <p>Reverse polarity protection</p> <p>Overvoltage protection for voltages > 25 Vdc</p>
Dimensions	<p>106 x 90 mm height 60 mm</p> <p>DIN rail mount width 25 mm</p>

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