



## OAS-S

OPTICAL ALARM SYSTEM - SMOKE



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.

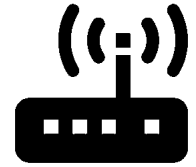
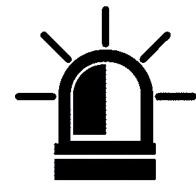
## CONNECTIONS



fiber optic



Single input Control Unit



fiber optic



Fiber optic to USB direct connection.  
Requires signal converter  
and dedicated software.



## ALARM TYPE

OAS-S (optical alarm system - smoke)

## STANDARD CONFIGURATION

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

## OPTIONS

USB optical converter  
Fiber optic - customizable length up to 50 m max  
Switchboard with power supply and button (to reset the alarm)

## 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)
Dimensions	Diameter 110 mm, height 50 mm

Subject to change without notice



## 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 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	Normally open contact max 2 A; 62.5 VA for: - Alarm (contact normally closed) - Error (contact normally closed) - Low batteries (contact normally closed) - Reserved for future expansion (contact normally open) 0..1 Vdc analog outputs max 10 mA - 2 analog outputs for future expansions with a variable value between 0 and 1 Vdc
Local signaling	LED indication: - Red - Alarm - Yellow - Error - Blue – Low Batteries buzzer 95 dB <sub>A</sub> - 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	- Unidirectional optical fiber with ASCII serial protocol to the detector - 1 fiber optic input for the detectors - USB for FW update
Power supply	12..24 Vdc max 1A Reverse polarity protection Overvoltage protection for voltages > 25 Vdc
Dimensions	106 x 90 mm height 60 mm DIN rail mount width 25 mm

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The AOS-CU single input Control Unit is required to support a single smoke detector

The AOS-CU-5 five inputs Control Unit is required to support up to 5 smoke detectors

