PRODUCT BRIEF - NeoLIDAR

@osf®

AUTOMATIC FAST FIRE DETECTION SYSTEM FOR OPEN SPACES

@osf® is the most advanced solution from *@integra* group in the field of fire detection for large open spaces, including industrial and forest fires. Its unique and pattented technology allows for very early detection of the smoke generated bu just-started fires. Small columns of smoke are detected at more than 3 km, provided they come up on the horizon.

@osf® uses a number of parameters to optimise detection: emitter power, sensitivity, amplifier gain, number of repetitions, sampling time and detection threshold. All of them are fully configurable, and can be changed to adjust to varying conditions.

@osf® scans the whole area under its surveillance in less than 3 minutes. It can have different detection parameters for each position, and also for different time periods. Thus, detection procedure is optimised for each surveyed area, which could be larger than 3.000 hectares.

@osf® reports each alarm of fault to a Control Centre, where log of events is recorded. Remote control is possible in order to evaluate the seriousness of the alarm, and the best extinction strategy to execute.

IT DETECTS SMOKE, EARLY-WARNING SYSTEM

@osf® detectS smoke. It is rather insensitive to the target temperature, because it is not a thermal system. The smoke is produced at the earliest stages of fire. Thus, it is a very early warning-system.

FULLY AUTONOMOUS AND AUTOMATIC

@osf® does not require human supervision, the operator only needs to attend it when an alarm is produced.

EXTREMELY SENSITIVE

@osf® can detect minute fractions of the scattered beam due to a triple amplification (optical, electronic and algorithmic), which makes it possible to detect very thin smoke at a very early stage.

IT ONLY REACTS TO ITS OWN LIGHT

@osf® is designed to respond only to its own emitted light.

LOW FALSE ALARM RATIO

@osf® develops a validation procedure which help in reducing false alarmas. This procedure is in continuous evolution and improvement. Optionally @osf® can be endowed with other components which greatly contribute to identify false alarms (thermal cameras, spectrometers, polarimeters...).

VISUAL DOCUMENTATION HELPS IN TAKING DECISIONS

@osf® helps in taking decisions sending pictures or videos of the detected targets. The fire brigade will have a picture of the alarm to assess its seriousness and urgency.

CONTINUOUS OPERATION

@osf® operates 24/7, as long as it has a power supply.

PERFORMS BETTER AT NIGHT

Due to the absence of sunlight (main input component), the system performs much better at night. Thus, @osf® works at its peak when less human supervision is expected.

WI-FI Y UMTS/3G CONNECTIVITY

@osf® can connect with Control Centre via WIFI (preferred industrial solution) or UMTS/3G (preferred forestry solution). For isolated locations, satellite communications are possible.

VERY LOW POWER CONSUMPTION

Power intake is so low that @osf® can easily be powered from small solar panels or micro-wind generators.

RUGGED, ENVIRONMENTALLY RESISTANT

@osf® can withstand very harsh meteorological conditions, including extreme temperatures and heavy rain.

REMOTE MANUAL CONTROL

@osf® can be manually controlled from remote control centre.

TECHNICAL SPECIFICATIONS

@osf®

AUTOMATIC FAST FIRE DETECTION SYSTEM FOR OPEN SPACES

Produc Model	Specifications
@osf-b	Basic model with azimut/zenit gimbal mount,communication WIFI, UMTS/3G, and 12 Vdc power supply.

Performance	
Detection Range:	0-3 km (minimum)
Communications:	Standard: WIFI, UMTS/3G Optional: GPRS, satellite
Electrical supply:	12 Vdc
Power:	Average 15W @12 Vdc, peak 24W
Digital output:	2 voltage free contacts: Fire and Fault (to be connected to fire pannels).
Digital inputs:	2 monitored contacts: System reset and power failure (to be connected to fire pannels).

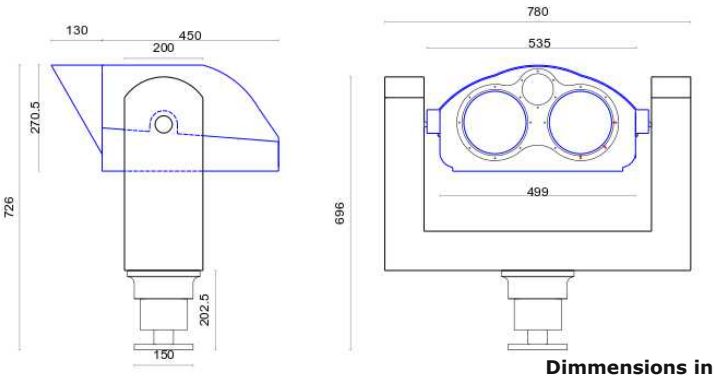
Mechanical	
Type of mount:	Gimbal mount- Azimuth and Zenith
Azimuth range:	0 - 360º
Zenith range:	+/- 40º (and any range within).
Azimuth Repeatability:	15'
Zenith Repeatability:	15'
Max. Azimuth Speed:	90º/s
Max. Zenith Speed:	90º/s
Gimbal Mount:	Standard EN 1092-2 DN40 Flange
Maximun Load:	40 kg.

Optical	
Emitted radiation:	Infrared 950 nm
Power Range:	0.001-3 W continuous 0.001-4.5 W peak
Emitted intensity:	105 - 3650 W/sr
Background radiation rejection:	Up to 120 dB
Emitter optics:	Acrylic dioptrics
Receiver optics:	Acrylic dioptrics

Electronics	
Sensitivity:	0.6 A/W
Repeatability:	+/- 0.5% full scale
Available Storage:	4 Gbyte
Accelerometer:	Triaxial 0-50 m/s2
Magnetometer:	+/- 0.0008 Tesla
Gyroscope:	Triaxial +/- 2000º/sec
Inclinometer:	+/- 2º

Standard Camera	
Image Sensor:	1/4'' progressive CMOS
Minimum Ilumination:	Colour: 0.2 lux @ f1.2 B/W: 0.02 lux @ f1.2
Electronic Shutter:	1/25 S - 1/100,000 s
Auto Iris:	DC Drive
Day and Night:	IR cut filter with auto switch
Video compresion:	H.264 / MJPEG
Bit rate:	32 kpbs - 8 mbps
Optics:	varifocal 5-50 mm
Optical Zoom:	1 a 5
Image Size:	640x480 pixels
Typical size of picture file:	20 kbyte
Frame rate:	25 fps (640x480)
Storage size:	2 Gbytes/16000 imagenes (aprox.).
Intelligent Alarm:	Motion Detection, Video Loss, Network disconnect, IP Address conflict...

Environment	
Protection:	IP-66
Weight:	34 kg (with Gimbal Mount).
Temperature Range:	-20, +60ºC
Humidity Range:	0 - 100 %



Dimmensions in mm.

Integraciones Técnicas de Seguridad S.A.

Integra Telecomunicación, Seguridad y Control, S.A.

Pol. Ind. Espíritu Santo - C/ Nóbel 15

15660 - Cambre - A Coruña - Spain

integra@integraciones.com www.integraciones.com

Tel. +34 981 639608 Fax +34 981 637981

TÜVRheinland® CERTIFIED

Management System
ISO 9001:2008
ISO 14001:2004

www.tuv.com
ID 9105075098