WELCOME TO FIDEGAS®

www.fidegas.com

40 fg
1984-2024

EXPERTS IN
GAS DETECTION

SINCE 1984

ABOUT OUR COMPANY

Comercial de Aplicaciones Electrónicas, S.L. (C.A.E., S.L.) was registered in February 1990 with the new Companies Act, continuing its design, manufacture, marketing and repair of safety systems for gas installations that were already being developed by Julio Bouzas under the FIDEGAS® trademark since 1984.

FIDEGAS® is a trustworthy private brand that is recognised both nationally and abroad, thanks to the certified quality and safety of its products, with a broad range of references that cover a significant part of the market needs.

INNOVATION PROJECTS

H₂BIDEA

Development of technological solutions to operate with 100% hydrogen distribution networks on the road to decarbonisation.

KATA

To discover our history,
click on this image. ↓

1981 - 1991

1981	FIRST TESTS
1984	FIDEGAS® TRADEMARK REGISTRATION
1991	C.A.E., S.L. FOUNDATION

1992 - 2002

1995	OWN LABORATORY
1998	FACILITY RELOCATION
2000	IMPLEMENTATION OF ISO 9001:2000

2003 - 2014

2003	ATEX CERTIFIED SYSTEM
2008	AENOR Ⓝ CERTIFICATE
2014	MATELEC INNOVATION AWARD

2015 - 2024

2015	TRANSITION TO ISO 9001:2015
2018	NEW CORPORATE IMAGE
2021	GENERATIONAL CHANGE
2024	40TH ANNIVERSARY

RESEARCH, DEVELOPMENT AND INNOVATION

CERTIFIED PRODUCT GUARANTEES

STAFF WITH INITIATIVE AND INVOLVEMENT

ENERGY EFFICIENT DESIGNS

INTERNAL AND CLIENT TRAINING

EXCELLENCE IN AFTER-SALES SERVICE

fidegas

Advanced Systems for the Generation, Distribution and Use of **H**ydrogen Carriers (**A**mmonia and Me**Tha**nol)
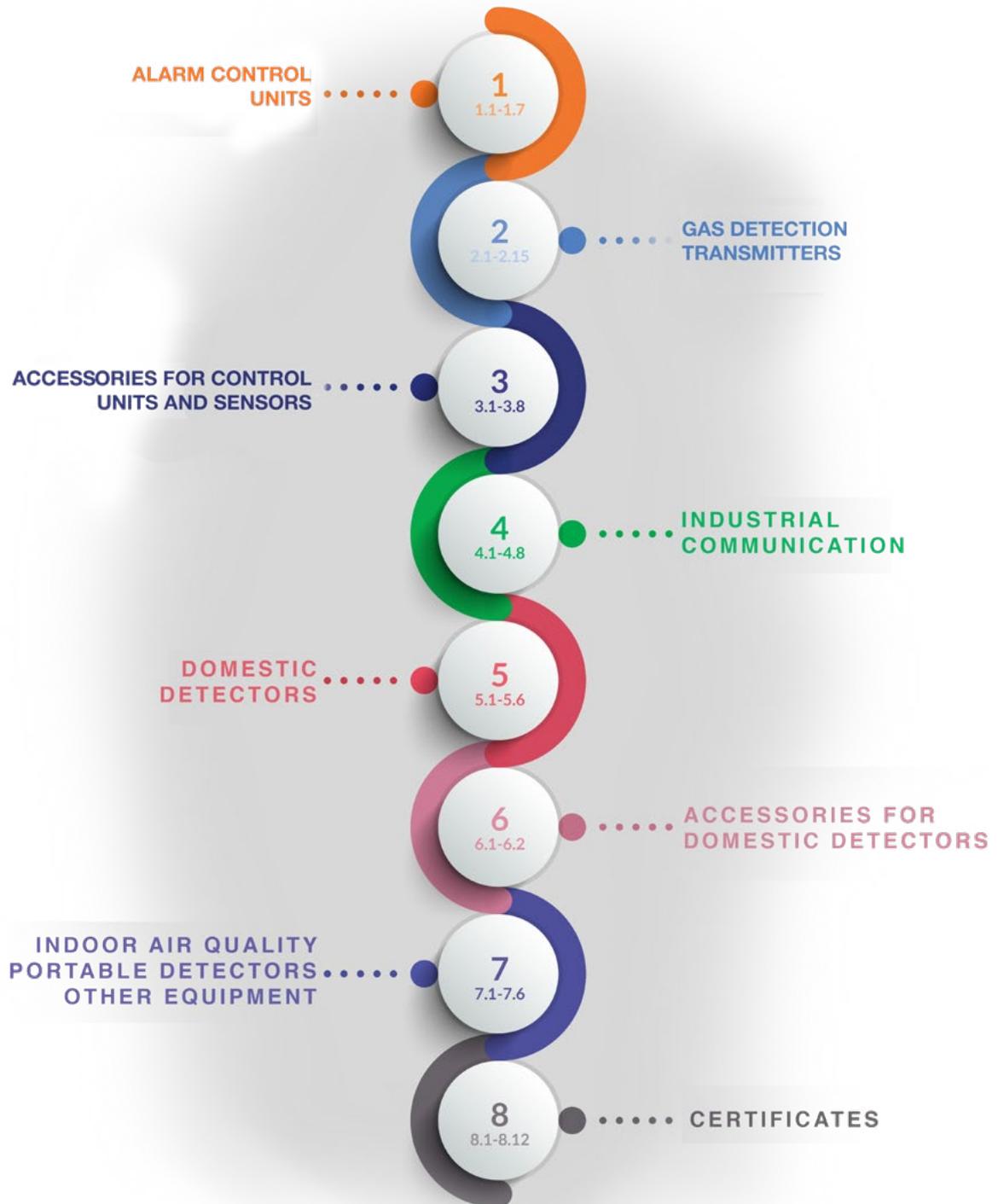
HiMUGI

Efficient and sustainable **hydrogen propulsion systems** for mobility and transport

Some people say their products are good... we certify them.

FIDEGAS® a brand you can trust

CERTIFIED MANAGEMENT SYSTEM IQNet

AENOR GESTIÓN DE LA CALIDAD ISO 9001

AENOR DETECTORES DE GAS

Ex ATEX

Laboratorio Oficial J.M. Madariaga

CE

Find what you need with ease.
Click on the product family you
are interested in.

fg fidegas

INDUSTRIAL   COLLECTIVE COMMERCIAL   DOMESTIC   CARAVANS   BOATS

A SOLUTION FOR EACH TYPE OF GAS
Certified quality and safety

	CA Control unit	SCAEDA	CS Control Unit	D-150i
SCOPE OF USE	Collective, commercial and industrial ATEX	Commercial and industrial	Collective, Commercial and industrial	Commercial and industrial
SUPPLY	110-230 Vac	110-230 Vac	110-230 Vac	110-230 Vac / 12-24 Vdc
INPUT	4-20mA	Fidegas® Series	4-20 mA or digital	Integrated sensor
VOLTAGE OUTPUT	12 Vdc and 230 Vac			
LP OUTPUT	NC	5 per line	Switched NA - NC	Switched LP (NC) y 4-20 mA
MAX Nº SENSORS	2 / 4 / 8	14 / 28 / 42	4	1
BATTERY	Optional			Optional
DIMENSIONS	355 x 260 x 85 mm	According to model	90 x 106 x 58 mm	198 x 103 x 67 mm
STANDARD	EN 60079-29-1	EN 60079-29-1 EN IEC 62990-1	EN 50271	EN IEC 62990-1

fg fidegas
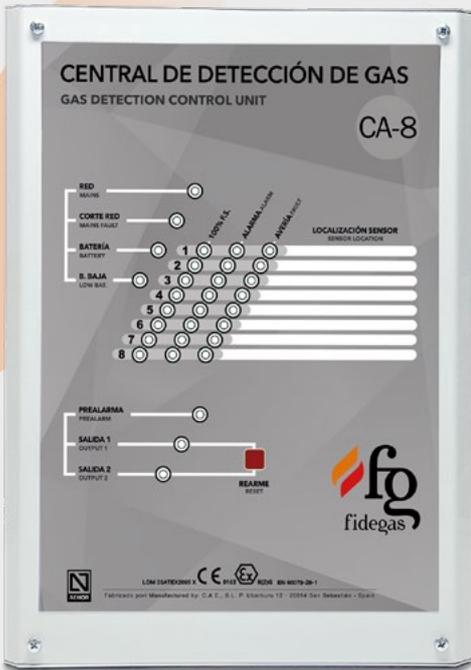
CA Control Unit

Alarm control units for 2, 4 and 8 certified gas detection transmitters in accordance with Standard EN 60079-29- 1, therefore meeting the requirements of European Directives 2014/34/EU ATEX (explosive atmospheres) and 2014/30/EU (Electromagnetic compatibility).

Its use with compatible FIDEGAS® S/3 and S/2 gas detection transmitters ensures a high degree of linearity and precision in terms of required detecting levels, while its 4-20 mA current loop output makes the system easy to install.

TECHNICAL SPECIFICATIONS

Scope	Collective, commercial and industrial ATEX	**Built-in battery charger**	
Supply	110-230 Vac - 50/60 Hz	**Manual reset button (Reset)**	
Inputs	Analogue 4-20 mA	**Certified according to**	EN 60079-29-1
Outputs	230 Vac, 12 Vdc y LP	**Includes**	
Three alarm levels	12% FE (pre-alarm) 20% FE (alarm) 100% FE (optical indication) FE: Full Scale	**FIDEGAS® test kit to check proper operation during:** - Start-up - Maintenance	
Indications	Alarm, fault, battery and event memory lights		

Accessories for control units		Page
00032	B-01 Battery	3.3
00035	UPS at 230 Vac	3.3
00308	S3 cables	3.2
00107	IP66 AC-01 cabinet	3.3
00047	MOD-V1 display module	3.3
00045	AL-2 Alarm	3.4
00028	AL-3 Alarm	3.4
03604	AL-4 Alarm	3.4
00317	GPRS Telecontrol	3.7

Compatible with

S/3 and S/2 Sensors   **Toxic S/10 Sensors**

FIDEGAS® certified gas detection system

Consisting of CA Control Unit, S/3-2 Gas Detection Transmitter, S3 cable and FIDEGAS® Test Kit.

Certified to work together

REFERENCE	NAME	MAX. Nº SENSORS	Nº OUTPUTS	STEEL BOX
00014	CA-2 Control Unit	2	1	
00015	CA-4 Control Unit	4	2	
00016	CA-8 Control Unit	8	2	260 (L) x 355 (H) x 85 (W) mm
00349	CA-10 ControlUnit	10	3	
00049	CA-12 Control Unit	12	4	
00245	CA-16 ControlUnit	16	4	600 (L) x 400 (H) x 200 (W) mm

SCAEDA Control Unit

Central alarm with touch screen for configuration and monitoring through a synoptic, based on industrial communication and allowing the connection of up to 14 remote Sensors with serial communication per line, up to a maximum of 3 lines (42 Sensors). The connection to the Sensors via RS485 is "plug-and-play", which means that these are automatically detected by the control panel and do not need to be configured.

Each connected Sensor has 2 configurable alarm levels in both value and operating mode. In addition, through the control panel, it is possible to communicate individually with each Sensor for diagnosis, configuration and calibration. Each line has 4 potential-free inputs that can be addressed to any of the line outputs and can be configured in operating mode, normally open, normally closed, with or without interlocking.

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial
Supply	110-230 Vac - 50/60 Hz
Inputs	4 LP (per line)
Outputs	5 of alarm / fault (per line)

The standard configuration consists of one line. Additional lines up to a maximum of 3

Alarm levels	1 of alarm silence (per linea) 2 levels per Sensor
Indications	Synoptic on touch screen

| Accessories for control units		Page
00317	Telecontrol GPRS	3.7
03149	Modbus Module MC-MOD	4.3
Consult	Ethernet Module MC-ETH	4.4
03852	External Ethernet Connection	-

Compatible with

S/3 and S/2 Sensors

Toxic S/10 Sensors

REFERENCE	NAME	SCREEN SIZE	MAX Nº SENSORS	CABINET SIZE	ADDITIONAL LINE
03826	SCAEDA 42/10	10"	14 / 28 / 42	500 x 430 x 210 mm	03828
03824	SCAEDA 28/7	7"	14 / 28	425 x 325 x 180 mm	03827
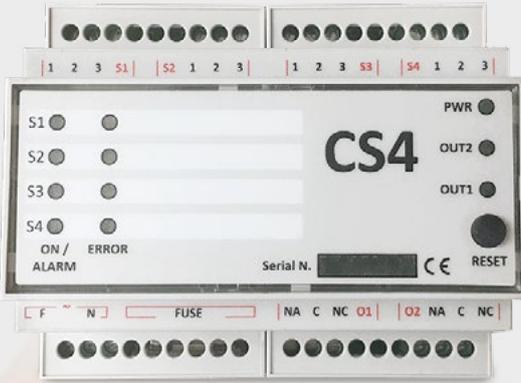
CS4 Control Unit

Alarm control unit suitable for installation on a DIN rail. Allows for the connection of up to 4 gas detection transmitters simultaneously through its 4 analogue (4-20 mA) or digital (0-10/15 V) inputs. Has two LP switched outputs, which the gas detection transmitters act on both in alarms (20% of the full scale) and for breakdowns.

TECHNICAL SPECIFICATIONS

Scope	Collective, Commercial and industrial
Supply	110-230 Vac - 50/60 Hz
Power	30 W
Inputs	4 analogue or digital
Outputs	2 switched LP (NA-C-NC) ones in alarms and breakdowns
Indications	Presence, alarm and Sensor fault, central fault and mains failure

Manual reset button (Reset)	
Alarm silence	24 h
Dimensions	106 (L) x 90 (H) x 58 (W) mm
Weight	300gr

Analogue version compatible with
Combustible gases S/3 Sensors
Toxic gas S/3 and S/2 Sensors
Toxic gas S/10 Sensors

Digital version compatible with
Combustible gases S/3 Sensors

REFERENCE	NAME	INPUT	ALARMS LEVEL
04458	CS4+ CONTROL UNIT	4-20 mA	Low level: between 5% and 35% of full scale High level: between 10% and 60% of full scale
03244	CS4 CONTROL UNIT	0 -10/15 V	20% of the full scale

1.5

D-150i Detector

Detects the presence of toxic gases across two alarm levels and as it is a Type A detector, it is equipped to take executive actions in the event of a leak. It also has a 4-20mA current loop output proportional to the measured gas concentration, enabling remote monitoring of the gas concentration and converts the equipment into a real 2 in 1 meter and detector.

Typical examples of application: warehouses, food maturing warehouses, greenhouses, refrigeration systems, etc.

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial
Supply	110-230 Vac o 12-24 Vdc
Power	5 W
Output	4-20 mA for gas concentration monitoring
Two separate outputs	Low-level switched output / High-level (NC) LP output
Sensor	Infrared / Electrochemical
Useful life (according to Sensor)	2/5 years in clean air approx.

Test warning and end of life	
Alarm silencer	24 hr. magnetic switch Magnet Includesd
Dimensions and weight	198 x 103 x 67 mm / 660 gr

Includes

FIDEGAS® test kit to check proper operation during:
- Start-up
- Maintenance

Communication interface between software
CCS3 V2 and the D-150i Detector
for field calibration

I-S3-PV V2 Interface

Ref. **03323**

Calibration jack cable

Ref. **03556**

Panel jack cable

Ref. **03555**

GAS	REFERENCE	SUPPLY	RANGE	ALARM LOW LEVEL	ALARM HIGH LEVEL
NH_3	00512	110-230 Vac	0-5000 ppm 0-100 ppm	>500 ppm >20 ppm	>3000 ppm >50 ppm
	03265	12-24 Vdc	0-5000 ppm 0-100 ppm	>500 ppm >20 ppm	>3000 ppm >50 ppm
CO	03281	110-230 Vac	0-300 ppm	>60 ppm	>200 ppm
	03282	12-24 Vdc	0-300 ppm	>60 ppm	>200 ppm
H_2S	03279	110-230 Vac	0-50 ppm 0-100 ppm	>5 ppm >20 ppm	>20 ppm >50 ppm
	03631	110-230 Vac	0-500 ppm	>100 ppm	>350 ppm
	03280	12-24 Vdc	0-50 ppm 0-100 ppm	>5 ppm >20 ppm	>20 ppm >50 ppm
	03632	12-24 Vdc	0-500 ppm	>100 ppm	>350 ppm
O_2	03212	110-230 Vac	0-25% v/v	<17% v/v	>23% v/v
	03278	12-24 Vdc	0-25% v/v	<17% v/v	>23% v/v
CO_2	03127	110-230 Vac	0-2% v/v	>0,5% v/v	>1% v/v
	03283	12-24 Vdc	0-2% v/v	>0,5% v/v	>1% v/v

MAIN SECTORS USING DIFFERENT GASES

SECTORS	Acetylene	Hydrogen Sulphide	Isopropyl Alcohol	Ammonia	Butane/Propane	Sulphur Dioxide	Carbon Dioxide	Nitrogen Dioxide	Ethylene	Gasoline	Hexane	Hydrogen	Methane	Carbon Monoxide	Ethylene Oxide	Oxygen
Disinfectants, herbicides, fumigants			✓	✓		✓		✓								✓
Atmospheric contaminants				✓		✓	✓	✓						✓		✓
Glues and Adhesives			✓									✓				
Cleaning			✓	✓								✓				
Fertilisers				✓		✓										✓
Shipyards	✓				✓							✓				
Ships	✓				✓				✓					✓		
Metal Industries (Oxycut)	✓				✓	✓										
Cork industry											✓					
Metallurgical industry						✓	✓	✓			✓			✓	✓	✓
Clinical, chemical laboratories...			✓	✓	✓	✓			✓		✓	✓	✓			✓
Cesspits		✓				✓							✓	✓	✓	
WWTPs		✓											✓	✓	✓	
Kitchens					✓								✓	✓		
Garages and Tunnels (not approved)		✓				✓								✓		✓
Co-generation					✓		✓	✓						✓		
Industrial boilers					✓		✓	✓		✓				✓	✓	
Air conditioning				✓										✓	✓	
Garage			✓		✓		✓					✓	✓			
Batteries												✓				
Textile Industries																✓
Service Stations					✓				✓	✓	✓	✓				
Chemical Products		✓	✓	✓		✓			✓		✓			✓		
Paints				✓	✓						✓					
Fuel Storage	✓	✓			✓					✓	✓		✓			
Paper Industry		✓		✓		✓								✓		
Farms with Animals		✓		✓		✓							✓			
Refrigeration Industries				✓	✓	✓										
Medicine			✓	✓					✓		✓	✓			✓	✓
Greenhouses		✓		✓		✓			✓				✓	✓	✓	
Food Industry		✓		✓	✓	✓			✓				✓	✓		

GASES

fidegas

SELECTION GUIDE

A SOLUTION FOR EACH TYPE OF GAS

Detection of toxic gases, explosives and oxygen

All remote Sensors are powered at **12-24 Vdc and have a 4-20 mA output.**
RS-485 communication is available as an option

	Explosive gases	Toxic gases	Oxygen	Normative
S/3-2	✓			EN 60079-29-1
S/3-T1 **S/2-T1**		✓		EN IEC 62990-1 EN 50545-1
S/3-T2 **S/2-T2**			✓	EN 50104
S/3-IR **S/2-IR**	✓	✓		EN 60079-29-1 EN IEC 62990-1
S/3-R **S/2-R**	✓	✓		EN 50676
TG-2H		✓	✓	EN IEC 62990-1 EN 50104
S/10		✓		EN 50545-1

FIDEGAS® EXPLANATORY VIDEOS

**How to perform
an operating test**

**How to replace
spare part S/3
and S/2**

**How to deal with
a gas leak**

S/3-2 Gas Detection Transmitters

S/3-2 remote gas detection Sensors detect the presence of combustible gases. Their 4-20 mA current loop output industrial-standard output is proportional to the concentration of gas present in the air. They offer a high level of linearity and accuracy in detection and can be used in a system with inputs for 4-20 mA, or with FIDEGAS® compatible with control units.

INCLUDED

CERTIFIED PRODUCT

2 YEARS GUARANTEE

ATEX

CE 0163 Ex II 2G Ex d IIC T6 Gb EN 60079-29-1

LCOE LABORATORIO CENTRAL OFICIAL DE ELECTROTECNIA

Laboratorio Oficial J.M. Madariaga

AENOR DETECTORES DE GAS

TECHNICAL SPECIFICATIONS

Scope	ATEX collective, commercial and industrial	Enclosure	IP66
Supply	12-24 Vdc	Classification	Grup II Category 2G
Output	4-20 mA	Dimensions / weight	140 x 162 x 91 mm 1150 gr
Detection range	(0-100)% LEL	Certified according to standards	EN 60079-29-1
Sensor	Catalytic	Spare parts available for replacement	
Useful life	4 years in clean air approx.		
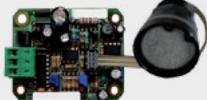
Version with SERIES communication available.

Accessories for sensors		Page
03665	LS3 bracket for S/3 transmitter	3.1
04056	Splash guard for S/3 & S/2 transmitters	3.1
04687	Protective cover for S/3 & S/2 transmitters	3.1
03645	Gas collection cone for S/3 & S/2 sensors	3.2
01314	S/3 mask with activated carbon filter	3.2
Enquire	FIDEGAS® Test Kit	3.5
03932	MS3-RE V3 relay module	3.6
Enquire	MIR display module	3.7
03845	MIR V3 remote indicator	3.7

Compatible with

Central CA ATEX

Analogue CS4 Control Unit

CS4

GPRS Telecontrol

CENTRAL DE DETECCIÓN DE GAS CA-8

TELECONTROL GPRS/SMS
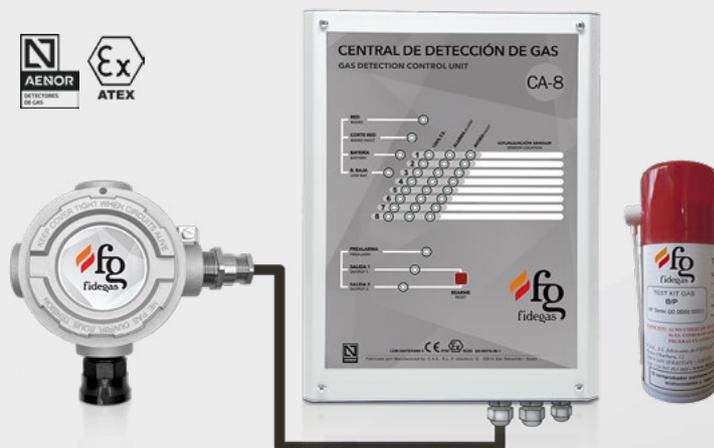
FIDEGAS® certified gas detection system

Consisting of CA Control Unit, S/3-2 Gas Detection Transmitter, S3 cable and FIDEGAS® Test Kit.

Certified to work together

REFERENCE	GAS	SPARE PART REF.	TEST KIT
00020	Methane (CH_4)	00122	00056
00021	Butane / Propane (C_3H_8)	00123	00055
00022	Hydrogen (H_2)	00117	00057
00262	N-butyl acetate ($C_6H_{12}O_2$)	03284	00089
00261	Ethyl acetate ($C_4H_8O_2$)	00241	00301
00077	Acetylene (C_2H_2)	00352	00213
00286	Acetone (C_4H_6O)	00182	00214
00063	Explosive Ammonia (NH_3)	00119	00197
00306	Butanol (C_4H_9OH)	00355	00323
00234	Butanene or Ethyl methyl ketone ($CH_3COC_2H_5$)	00179	00235
00257	Cyclohexane (C_6H_{12})	00249	00175
00185	Ethanol or ethyl alcohol (C_2H_5OH)	00225	00186
00053	Ethanol (C_2H_4)	00157	00236
00036	Gasoline	00118	00174
00078	Hexane (C_6H_{14})	00097	00058
00190	Methanol or methyl alcohol (CH_3OH)	00180	00343
00212	Pentane (C_5H_{12}) / Cyclopentane (C_5H_{10})	00268	00199
00083	Propanel or isopropyl alcohol (C_3H_7OH)	00080	00350
00189	Toluene ($C_6H_5CH_3$)	00181	00260
00328	Xylene ($C_6H_4(CH_3)_2$)	00356	00336

* For other gases, please consult us.

S/3-T1 • S/2-T1 Gas Detection Transmitters

S/3-T1 and S/2-T1 remote gas detection Sensors detect the presence of toxic gases. Their 4-20 mA current loop output industrial-standard output is proportional to the concentration of gas present in the air. They offer a high level of linearity and accuracy in detection and can be used in a system with inputs for 4-20 mA, with FIDEGAS® Compatible control units or with industrial communication modules.

INCLUDED

S/3-T1

S/2-T1

TECHNICAL SPECIFICATIONS

Scope	Collective, Commercial and industrial	**Enclosure**	ATEX: IP66 ABS: IP66/67
Supply	12-24 Vdc	**Dimensions / weight**	ATEX: 140 x 162 x 91 mm / 1150 gr ABS: 130 x 140 x 75 mm / 300 gr
Output	LP y 4-20 mA		
Connectivity	TTL Series RS-485 (optional)	**Spare parts available for replacement**	
Sensor	Electrochemical		
Useful life	2 years in clean air approx.		

Accesories for sensors		Page
03665	LS3 bracket for S/3 transmitter	3.1
04056	Splash guard for S/3 & S/2 transmitters	3.1
04687	Protective cover for S/3 & S/2 transmitters	3.1
03645	Gas collection cone for S/3 & S/2 sensors	3.2
01314	S/3 mask with activated carbon filter	3.2
Consult	FIDEGAS® Test Kit	3.5
04163	RS-485 module for remote sensor	3.6
03932	MS3-RE V3 relay module	3.6

Accesories for sensors		Page
04015	M-CAL calibration module	3.6
Consult	MIR display module	3.7
03297	MK-E7 calibration mask	3.8

Compatible with

Remote indicator MIR V3

Complete your gas detection system with the following
FIDEGAS® compatible products

Analogue CS4 Control Unit   **ATEX CA Control Units**   **Modules of Industrial Communication**   **SCAEDA**

GAS	REF. S/3	REF. S/2	RANGE	SPARE PART REF.	TEST KIT
CO	00151	03375	0-300 ppm	00155	00072
H₂S	00152	03326	0-50 ppm 0-100 ppm	00156	00069
	03634	03636	0-500 ppm	03635	**
	03640	03638	0-2000 ppm	03639	**
NH₃	00086	03376	0-100 ppm	00164	00144
	00386	03377	0-5000 ppm	03285	03738
SO₂	00150	03380	0-20 ppm	00166	**
NO	00153	03418	0-100 ppm	00285	**
NO₂	00250	03381	0-20 ppm	00340	**
Cl₂	00217	03379	0-5 ppm	00281	**
ClO₂	00322	04248	0-5 ppm	04249	**
HF	04190	04222	0-10 ppm	04223	**
HCl	00325	04181	0-20 ppm	00357	**
O₃	04220	03822	0-5 ppm	04221	**
METHANOL	00206	04211	0-1000 ppm	00417	00416

* For other gases, please consult us.
** Only standard gas (3.5) is available.

S/3-T2 • S/2-T2 Gas Detection Transmitters

S/3-T2 and S/2-T2 gas detection transmitters detect oxygen. Their 4-20 mA current loop output industrial-standard output is proportional to the concentration of gas present in the air. They offer a high level of linearity and accuracy in detection and can be used in a system with inputs for 4-20 mA, with FIDEGAS® compatible control units or with industrial communication modules.

INCLUDED

S/3-T2

ATEX

S/2-T2

ABS

TECHNICAL SPECIFICATIONS

Scope	Collective, Commercial and industrial	**Enclosure**	ATEX: IP66 ABS: IP66/67
Supply	12-24 Vdc	**Dimensions / weight**	ATEX: 140 x 162 x 91 mm / 1150 gr ABS: 130 x 140 x 75 mm / 300 gr
Output	LP and 4-20 mA		
Connectivity	TTL Series RS-485 (optional)	**Spare parts available for replacement**	
Sensor	Electrochemical		
Useful life	4 years in clean air approx.		

Accesories for sensors		Page
03665	LS3 bracket for S/3 transmitter	3.1
04056	Splash guard for S/3 & S/2 transmitters	3.1
04687	Protective cover for S/3 & S/2 transmitters	3.1
03645	Gas collection cone for S/3 & S/2 sensors	3.2
01314	S/3 mask with activated carbon filter	3.2
Consult	FIDEGAS® Test Kit	3.5
04163	RS-485 module for remote sensor	3.6
03932	MS3-RE V3 relay module	3.6

Accesories for sensors		Page
04015	M-CAL calibration module	3.6
Consult	MIR display module	3.7
03297	MK-E7 calibration mask	3.8

Compatible with

Remote indicator MIR V3

Complete your gas detection system with the following FIDEGAS® compatible products

Modules of Industrial Communication

SCAEDA

GAS	REF. S/3	REF. S/2	RANGE	OUTPUT	SPARE PART REF.	TEST KIT
O$_2$	00051	03382	(0-25)% v/v	4-20 mA / LP	00158	Deficiency: 00209 Excess: 04384

Analogue CS4 Control Unit

ATEX CA Control Units

GAS	REF. S/3	REF. S/2	RANGE	OUTPUT	SPARE PART REF.	TEST KIT
O$_2$	00052	03383	(21-0)% v/v	4-20 mA	00170	Deficiency: 00209 Excess: 04384

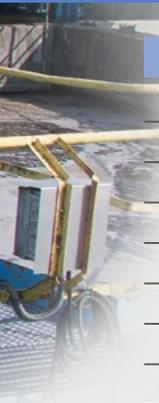# S/3-IR • S/2-IR Gas Detection Transmitters

The S/3-IR and S/2-IR remote gas detection Sensors detect the presence of toxic or combustible gases. Their industry standard 4-20 mA current loop output is proportional to the concentration of the gas in the air. They offer high linearity and accuracy of detection and can be used in a system with 4-20 mA inputs, with FIDEGAS® Compatible withtrol panels or with industrial communication modules.

INCLUDED

S/3-IR

ATEX

S/2-IR

ABS

2 YEARS GUARANTEE

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial	**Enclosure**	ATEX: IP66 ABS: IP66/67
Supply	12-24 Vdc	**Dimensions / weight**	ATEX: 140 x 162 x 91 mm / 1150 gr ABS: 130 x 140 x 75 mm / 300 gr
Output	LP and 4-20 mA		
Connectivity	Serie TTL RS-485 (optional)	**Spare parts available for replacement**	
Sensor	Infrared		
Useful life	6 years in clean air approx.		

Accesories for sensors		Page
03665	LS3 bracket for S/3 transmitter	3.1
04056	Splash guard for S/3 & S/2 transmitters	3.1
04687	Protective cover for S/3 & S/2 transmitters	3.1
03645	Gas collection cone for S/3 & S/2 sensors	3.2
01314	S/3 mask with activated carbon filter	3.2
Consult	FIDEGAS® Test Kit	3.5
04163	RS-485 module for remote sensor	3.6
03932	MS3-RE V3 relay module	3.6

Accesories for sensors		Page
04015	M-CAL calibration module	3.6
Consult	MIR display module	3.7
03297	MK-E7 calibration mask	3.8

Compatible with

Remote indicator MIR V3

Complete your gas detection system with the following
FIDEGAS® compatible products

Analogue CS4 Control Unit   **ATEX CA Control Units**   **Modules of Industrial Communication**   **SCAEDA**

GAS	REF. S/3	REF. S/2	RANGE	SPARE PART REF.	TEST KIT
CO_2	00291	03384	(0-2)% v/v	00240	00215
	03937	03946	(0-2000 ppm)	03938	04480
N_2O	03700	03984	(0-1000 ppm)	04133	**
Methane CH_4	00292	-	%LIE o %v/v	00284	00056
Butane/ Propane C_3H_8	00295	-	%LIE o %v/v	00321	00055

* For other gases, please consult us.
** Only standard gas (3.5) is available.

S/3-R • S/2-R Refrigerant Gas Transmitter

INCLUDED

S/3-R

ATEX

S/2-R

ABS

Industrial refrigeration systems use gases that can be toxic, flammable or displace oxygen. In addition to affecting people's health, they also pose risks to the environment. Therefore, to meet safety and environmental requirements, European regulations have been strengthened by making leak detection mandatory in most installations.

Refrigerants are classified according to their **level of flammability and toxicity**:

TOXICITY

FLAMMABILITY

	A Low toxicity	B High toxicity
1 Non- flammable	A1	B1
2L Low flammability	A2L	B2L
2 Medium flammability	A2	B2
3 High flammability	A3	B3

SECURITY group

L1
HIGH SAFETY

L2
MEDIUM SECURITY

L3
LOW SAFETY

1. CARBON DIOXIDE

GAS	RANGE	MODEL	S/3	S/2	SPARE PART REF.
A1 — R-744 (CO_2)	(0-5)% v/v	S/3-IR	00291	03384	00240
	(0-2)% v/v	D-150i	03127		

2. AMMONIA

GAS	TYPE	RANGE	MODEL	S/3	S/2	SPARE PART
B2L — R-717 (Ammonia)	toxic	(0-5.000) ppm	S/3-T1	00386	03377	03285
			D-150i	00512		
	explosive	(0-15)% v/v	S/3-2	00063	-	00119

3. HYDROCARBONS

GAS	RANGE	MODEL	S/3	SPARE PART REF.
A3 — R-290 (Propane)	(0-100)% LEL	S/3-2	00021	00123

4. HYDROFLUOROCARBON GASES (HFCS)

GAS	RANGE	MODEL	REF.	SPARE PART REF.
A1 — R-134a	(0-5.000) ppm	S/2-R ABS	04230	04231
		S/3-R ATEX	04276	04281
R-404a (44/52/4)	(0-5.000) ppm	S/2-R ABS	04232	04233
		S/3-R ATEX	04277	04282
R-407c (53/25/52)	(0-5.000) ppm	S/2-R ABS	04234	04235
		S/3-R ATEX	04278	04283
R-410a (50/50)	(0-10.000) ppm	S/2-R ABS	04236	04237
		S/3-R ATEX	04279	04284

* Consult availability

5. NEW A2L GROUP HFO REFRIGERANTS

GAS	RANGE	MODEL	REF.	SPARE PART REF.
A2L — R-32	(0-10.000) ppm	S/2-R ABS	04250	04251
	(0-100)% LIE	S/3-R ATEX	04252	04226
R-1234yf	(0-5.000) ppm	S/2-R ABS	04253	04254
	(0-100)% LIE	S/3-R ATEX	04255	04256
R-1234ze	(0-5.000) ppm	S/2-R ABS	04257	04258
	(0-100)% LIE	S/3-R ATEX	04259	04260
R-454a	(0-100)% LIE	S/3-R ATEX	04261	04262
R-454b	(0-100)% LIE	S/3-R ATEX	04263	04264
R-454c	(0-100)% LIE	S/3-R ATEX	04265	04266
R-455a	(0-100)% LIE	S/3-R ATEX	04267	04268

* For other gases, please

2-Wire Gas Transmitter TG-2H

TG-2H 2-wire gas transmitters detect the presence of toxic gases or oxygen. Its industrial standard output in 4-20 mA current loop is proportional to the concentration of the gas present in the air. They offer high linearity and precision in detection and can be used in a system that has inputs for 4-20 mA.

INCLUDED

TG-2H

2 YEARS GUARANTEE

TG-2H

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial	**Enclosure**	ATEX: IP66 ABS: IP66/67
Supply	12-24 Vdc	**Dimensions and Weight**	ATEX: 140 x 162 x 91 mm / 1150 gr ABS: 130 x 140 x 75 mm / 300 gr
Outputs	LP and 4-20 mA (2 wires)		
Connectivity	Serie TTL	**Spare parts available for replacement**	
Sensor	Electrochemical		
Useful life	2 years in clean air approx.		

Sensor accessories		Page
03665	LS3 bracket for S/3 transmitter	3.1
04056	Splash guard for S/3 & S/2 transmitters	3.1
04687	Protective cover for S/3 & S/2 transmitters	3.1
03645	Gas collection cone for S/3 & S/2 sensors	3.2
01314	S/3 mask with activated carbon filter	3.2
Consult	FIDEGAS® Test Kit	3.5
04015	M-CAL calibration module	3.6
03845	MIR V3 remote indicator	3.7

Sensor accessories		Page
01000	USB-TTL connection cable	3.8
03297	MK-E7 calibration mask	3.8

Compatible con

Central CS4 Analógica

CS4

GAS	REFERENCE	RANGE	BOX	SPARE PART REF.	TEST KIT
O_2	04008 03918	(0-25)% v/v	ATEX ABS	04009	00209
CO	03968 03967	0-300 ppm	ATEX ABS	04010	00072
H_2S	03978 03977	0-50 ppm 0-100 ppm	ATEX ABS	04011	00069

* For other gases, please consult us.

S/3 MPS gas transmitter

Ref. S/3-MPS gas transmitters detect the presence of combustible gases using MPS™ (Molecular Property Spectrometry) technology sensors. These intelligent sensors are capable of distinguishing between different groups of combustible gases.

2 AÑOS DE GARANTÍA

TECHNICAL SPECIFICATIONS

Scope	Collective, commercial and industrial ATEX		**Service life**	Useful life 10 years in clean air approx.
Power supply	12-24 Vdc		**Enclosure**	IP66
Output	LP and 4-20 mA		**Classification**	Group II Category 2G
Connectivity	Serie TTL RS-485 (opcional)		**Dimensions**	140 x 162 x 91 mm
Detection range	(0-100)% LEL		**Weight**	1150 gr
Sensor	MPS™			

Sensor accessories		Page
03665	LS3 bracket for S/3 transmitter	3.1
04056	Splash guard for S/3 & S/2 transmitters	3.1
04687	Protective cover for S/3 & S/2 transmitters	3.1
03645	Gas collection cone for S/3 & S/2 sensors	3.2
01314	S/3 mask with activated carbon filter	3.2
Consult	FIDEGAS® Test Kit	3.5
04163	RS-485 module for remote sensor	3.6
03932	MS3-RE V3 relay module	3.6
Enquire	MIR display module	3.7
03297	MK-E7 calibration mask	3.8

REFERENCE	GAS	REF. SPARE PART
04516	Combustible	04606

Complete your gas detection system with the following **compatible FIDEGAS® products.**

CS4 Analogue Control

ATEX CA Control Units

Industrial Communication Modules

SCAEDA

S/10 Toxic Remote Sensor

The Toxic S/10 Gas Detection Transmitters detect the presence of toxic gases through an electrochemical technology sensor, which guarantees the reliability of detection within the operation ranges in compliance with standard EN 50545-1.

TECHNICAL SPECIFICATIONS

Scope	Collective, commercial and industrial	Enclosure	IP 54
Supply	12-24 Vdc	Dimensions	108 x 108 x 56 mm
Outputs	LP and 4-20 mA	Spare parts available for replacement	
Sensor	Electrochemical		
Connectivity	Serial		

Accessories for sensors		Page
Consult	FIDEGAS® Test Kit	3.5
04163	RS-485 module for remote sensor	3.6
03932	Relay module MS3-RE V3	3.6
04015	M-CAL calibration module	3.6
03845	MIR V3 Remote Indicator	3.7
03446	Calibration mask MK-S10	3.8

REFERENCE	GAS	RANGE	USEFUL LIFE	SPARE PART REF.	TEST KIT
00050	CO	0-300 ppm	5 years	03292	00072
03215	NO_2	0-30 ppm	2 years	03293	**

**Only standard gas (3.5) is available.

Complete your gas detection system with the following FIDEGAS® compatible products

Analogue CS4 Control Unit **ATEX CA Control Units** **Modules of Industrial Communication** **SCAEDA**

S/3-T • S/2-T temperature transmitter

S/3-T ambient and temperature transmitters operate as a temperature meter. Their 4-20 mA current loop industrial-standard output is proportional to the temperature measured. They offer a high level of linearity and accuracy in terms of measurement and can be used in a system with inputs for 4-20 mA, with FIDEGAS® compatible control units or with industrial communication modules.

INCLUDED

S/3-T

S/2-T

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial	**Outputs**	LP and 4-20 mA
Supply	12-24 Vdc	**Connectivity**	Serie TTL RS-485 (optional)
Detection range	Adjustable when required by customer (standard -20 ºC to 80 ºC)	**Enclosure**	ATEX: IP66 ABS: IP66/67
Reading resolution	0,1 ºC	**Dimensions and Weight**	ATEX: 140 x 162 x 91 mm / 1150gr ABS: 130 x 140 x 75mm / 300gr
Output resolution	According to detection range (Standard 0.4 ºC)	**Spare parts available for replacement**	

* The resolution of Outputs only affects the 4-20 mA Outputs, in case of using serial Connectivity the resolution would be the same as the reading resolution.

Accessories for sensors		Page
04163	RS-485 module for remote sensor	3.6
03932	Relay module MS3-RE V3	3.6
Consult	Remote display MIR	3.7
03845	MIR V3 Remote Indicator	3.7

REFERENCE	BOX	SPARE PART
00074	ATEX	00167
04238	ABS	

Complete your gas detection system with the following
FIDEGAS® compatible products

Analogue CS4 Control Unit   **ATEX CA Control Units**

Modules of Industrial Communication

SCAEDA

ACCESSORIES HIGH VALUE ADDED

For gas control units and remote sensors

LS3 SUPPORT for S/3 Sensor

Reference	03665

Accessory for attaching S3 sensors to the ceiling or other horizontal surface to maintain the correct mounting position with the sensor oriented vertically downwards. It is suitable when installation on a wall or vertical surface is not possible.

SPLASH GUARD
for Sensor S/3 and S/2

Reference	04056
Dimensions	10 cm high ⌀ 10 cm

The splash guard is an accessory that protects the sensor.

PROTECTOR for S/3 and S/2 transmitters

Reference	04687
Dimensions	248 X 150 x 105 mm

Stainless steel wall-mounting bracket designed to protect the S/3 and S/2 transmitters from potential mechanical impacts and splashes.

fg
fidegas

GAS COLLECTOR CONE
for Sensor S/3 and S/2

Reference	03645
Dimensions	Ø 30 cm

The gas collector cone is an accessory that attaches to the remote sensor to improve the capture of lighter-than-air gases such as methane, hydrogen, etc. in installations where the sensors are located above the points of possible gas leakage or emission.

S-3 mask with active carbon filter

Reference	01314

FIDEGAS® activated carbon filters protect the sensor against external contaminants, without causing interference in the detection of the target gas. The filter is contained in a special mask to be placed on the Sensor holder.

S/10 Cable

Reference	00025
Connection	C / ND --- S/10 Combustibles
Characteristics	4 x 0,22 mm^2 (shielded)
Format	Rolls 100 m
Standard	IEC 60332-1, IEC 60332-3, IEC 60754-1 IEC 60754-2, IEC 61034

S/3 Cable

Reference	00308
Connection	CA --- S/3, S/2 o S/10 toxic (without connections)
Characteristics	3 x 0,75 mm^2 (shielded)
Format	Rolls 50 / 100 / 500 m
Standard	EN 60079 - 25 "intrinsically safe" EN 50267 - 2-1 / 2-2 "halogen-free"

RS-485 Cable

Reference	03430
Connection	Bus RS-485
Characteristics	2 x 2 x 0,5 mm^2 (shielded)
Format	Rolls 100 / 500 m

Dry Battery **B-01**

Reference	00032
Voltage	12 Vdc
Capacity	3 Ah
Dimensions	110 x 60 x 80 mm
Weight	1500 gr

Uninterrupted power supply **UPS**

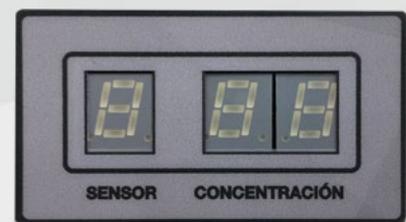| Reference	00035
Technology	Interactive Line with AVR
Supply voltage	230 Vac
Output voltage	230 Vac
Dimensions	330 x 110 x 140 mm
Autonomy	30 - 90 min. depending on loads

IP66 fabinet for AC-01 Control units

Reference	00107
Dimensions	430 (L) x 500 (H) x 210 (W) mm
Degree of protection	IP 66
Metalic cabinet for control units	Ref. CA and C / ND

Display module **MOD-V1**

Reference	00047
Valid for control units	CA - 2 / 4 / 8

The display module is an accessory for CA-2/4/8 alarm control units, which displays the gas concentration measured through each one of the gas detection transmitters connected to the control unit through a 3-digit display. This accessory is factory-fitted.

Alarm **AL-2**

Reference	00045
Alarm	Acoustic
Power	85 dB acoustics one meter away
Supply	12 Vdc

Alarm	**AL-3**	**AL-4**
Reference	00028 (12 Vdc) 03190 (24 Vdc)	03604 (12/24 Vdc)
Level sound	104 dB at 1 metre	106 dB at 1 metre
Light	Bright flash	Flashing light
Max. consumption	110 mA	45 mA
Protection level	IP315	IP65
Dimensions	155 x 114 x 44 mm	Ø 97,5 x 104 mm

AL-3   **AL-4**

Flow switch **IF-01**

Reference	00370
Dimensions	250 x 160 x 26 mm
Voltage	230 Vac
LP Contacts	230 Vac

* Available spare flow switch reference 00093

Air flow detection device in compliance with the requirements of Standard UNE 60670-6:2023. With all FIDEGAS® features to ensure maximum safety.

Differential Pressure Switch

Reference	04022
Pressure range	0,3 - 3 mbar
Contacts	0,4 A / 250 Vac
Weight	160 gr

Manual reset **RM-01**

Reference	03101
Dimensions	60 x 63 x 26 mm
Voltage	230 Vac

Equipment equipped with a push button (Manual Reset) to activate a solenoid valve once the extraction has been activated and the flow Switch or differential pressure Switch is in operation. It has an optical indication of extraction on and solenoid valve on , maximum safety and comfort for the user.

FIDEGAS® **Test Kit**

The FIDEGAS® Test Kit is a product Includesd in our certifications to comply with the regulatory requirements that allows the verification of the proper functioning of FIDEGAS® Remote Sensors and Detectors, for the commissioning and subsequent maintenance. It Includes 405 ml of gas and the mask to apply the gas.

REF.	SENSOR
00056	Metane (CH_4) / Natural Gas
00055	Butane/Propane (C_3H_8)
00057	Hydrogen (H_2)
00089	N-butyl acetate ($C_6H_{12}O_2$)
00301	Ethyl acetate ($C_4H_8O_2$)
00213	Acetylene (C_2H_2)
00214	Acetone (C_4H_6O)
00197	Explosive Ammonia(NH_3)
00323	Butanol (C_4H_9OH)
00235	Butanone or Ethyl methyl ketone ($CH_3COC_2H_5$)
00175	Cyclohexane(C_6H_{12})
00186	Ethanol or ethyl alcohol (C_3H_5OH)
00236	Ethanol (C_2H_4)
00174	Gasoline

REF.	SENSOR
00058	Hexane (C_6H_{14})
00343	Methanol or methyl alcohol (CH_3OH)
00199	Pentane (C_5H_{12}) / Cyclopentane (C_5H_{10})
00350	Propanol or isopropyl alcohol (C_3H_7OH)
00260	Tolueno ($C_6H_5CH_3$)
00336	Xylene ($C_6H_4(CH_3)_2$)
00072	Carbon Monoxide (CO)
00069	Hydrogen sulphide (H_2S)
00144	Toxic ammonia (NH_3)
00215	Carbon dioxide(CO_2)
00338	Tetrahydrothiophene (THT)
00416	Toxic methanol (CH_3OH)
00209	Oxygen (O_2) deficiency
04384	Oxygen (O_2) excess

CALIBRATION Bottle

TECHNICAL SPECIFICATIONS	
Gas volume of standard cylinders	110 l
Water volume	1.6 l
Volume	Bar 68 / PSIG 1000
Dimensions and Weight	359 x 90 mm / 1100 gr
Valve Outputs	C10 - 5/8˝ 18 UNF
Compliance with standard	EN 12205*

* EN 12205 requires non-refillable cylinders to have a non-refillable valve according to EN 13340.

REF.	GAS	% THEORETICAL	STABILITY
312049	Metane	2,2% v/v	60 months
312046	Propane	0,85% v/v	60 months
312016	Air	20,9% v/v	60 months
312024	CO	100 ppm	60 months
312172	H_2S	25 ppm	24 months
312192	NH_3	50 ppm	12 months
312230	NH_3	1000 ppm	12 months
312241	SO_2	10 ppm	24 months
312971	NO	25 ppm	12 months
314891	NO_2	5 ppm	12 months
312937	Cl_2	5 ppm	12 months
312727	O_2	15% v/v	60 months
312696	CO_2	1% v/v	60 months

Calibration bottle for the corresponding gas (Ref. depending on gas)

REGULATOR Flow

Reference	03164

The flow regulator and 6 mm pipe for use with calibration bottles and gas application covers.

TECHNICAL SPECIFICATIONS	
Number of entries	Two
Outputs Flow	0.5 l per minute (fixed)
Connection de Outputs	3 / 16" Bar
Input pressure	70 Bar Maxium
Gauge	0 – 1000 psi

Pole **P-01** and **P-02**

Model	Reference	Length
P-01	00344	Extension 1,5 metres for S/3 y S/2
P-02	03801	Extension 4,5 metres for S/3 y S/2

Essential for servicing / maintenance of Remote Sensors Ref. S/3 or S/2 at heights or in difficult access areas, additionally a Test Kit is required. Telescopic extension pole 1.5 metres or 4.5 metres. Both with 180° swivel mask.

MS3-WD-RS485 Module

Optional communications module for S/3, S/2 and S/10 toxic FIDEGAS® remote sensors with serial communication enabling RS-485 connectivity.

MS3-RE V3 Module

Reference	03932

Accessory module for FIDEGAS® remote sensors, providing remote sensors with relay outputs suitable for connection to other systems: two alarm outputs configurable as NO or NC, with or without interlocking, and one fault output. Alarm levels configurable at the factory or subsequently via software.
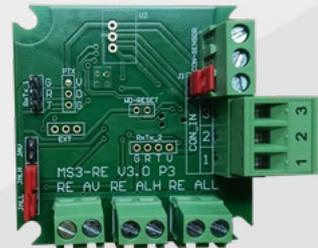
M-CAL calibration module

Reference	04015

Accessory module for gas transmitters in the Ref. S/3 or S/2 (T1, T2, Series, IR) and S/10 Toxic ranges, enabling field calibration using buttons or a magnet.

GPRS Telecontrol

Reference	00317
Supply	12 Vdc
Compatible with	Alarm control units /Gas Detection Transmitters / Detectors

Telecontrol and telemetry equipment via GSM/GPRS for industrial environments, which allows monitoring remote devices in a simple and efficient way. Sending alarm signals, analogue signals, digital signals, modbus variables, etc. Data logging and visualisation function in scada web.

MIR V3 Remote Indicator

Outputs LP	03845
Buzzer	03846

Compatible device for FIDEGAS® S/3 Remote Sensors to remotely display the measured concentration.

MIR V3 Display Module

LP	03809
Buzzer	03829

Optional display module for FIDEGAS® S/3 remote sensors to display the measured concentration in three digits on the remote sensor itself.

USB-TTL connection cable

Reference	01000

USB-TTL cable for connection between device with USB-TTL communication with a PC.

USB-RS 485 Connection cable

Reference	03218

USB-RS485 cable for connection between device with USB-RS485 comunication with a PC

Calibration mask MK-E7

Reference	03297

Calibration cover for S/3 and S/2 gas detection transmitters.

Calibration mask MK-D150i

Reference	03541
	D-150i Cover support
	Calibration cover
	Verification cover

Field calibration cover for D-150i detector.

Support

Calibration cover

Verification cover

Calibration mask MK-S10

Reference	03446
	S/10 Cover support
	Calibration cover
	Verification cover

Calibration cover for S10 detector.

Support

Calibration cover

Verification cover

CUSTOM-MADE MODULAR SYSTEMS
We work towards ensuring personal safety.

We present a **modular gas detection system** based on **serial communication**, with a high degree of versatility, allowing for installations tailored to customer needs, from a small stand-alone installation with a few sensors to integration into large systems with numerous sensors and levels of action.

It Includes standard industrial communication protocols for its integration in complex systems, initially modbus rtu, **modbus tcp/ip.**

The entire system can consist of up to **4 hierarchical levels**:

SCADA

MODBUS MASTERS

FIDEGAS® MASTERS

FIDEGAS® SLAVES
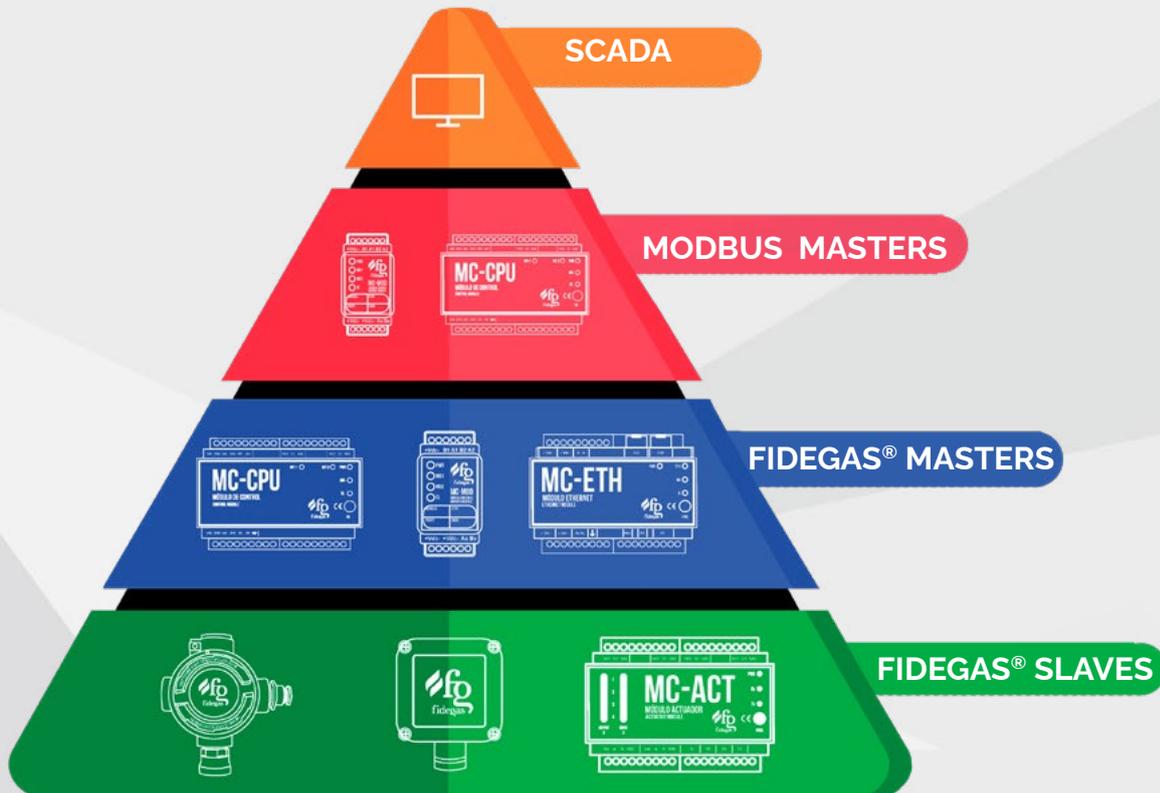
SCADA

The control and monitoring function of very complex systems with a large number of devices usually dependent on some type of SCADA, which are IT applications that allow the viewing, recording and/or simultaneous control of a large number of signals. Depending on the needs, they may be accessible remotely via the internet (SCADA WEBSITE) or have local restricted access (plant SCADA).

MODBUS MASTERS

Machines with input MODBUS protocol for connection with FIDEGAS® masters and that can be connected to higher-level devices such as plant PLC or SCADA.

FIDEGAS® MASTERS

Machines with input proprietary protocol (FIDEGAS® Series) and some type of industry standard such as output protocol. Will be used to connect a certain number of FIDEGAS® slaves to an industrial communication BUS and 3 or 4 level equipment.

According to the needs of the installation they can connect directly with equipment of level 4. In some cases they will have executive power and can form an autonomous system with external monitoring.

FIDEGAS® SLAVES

Machines with proprietary communication protocol with its own code for each type of device. The physical format used will be the 485, although may be used in TTL levels in certain cases.

There are other types of devices that complement those already described.

Complement: Device that is integrated into the serial bus FIDEGAS® but does not have its own address or protocol.
Equipment: MC-MOD-P

Gateway: A device that translates one type of industrial protocol into another type of protocol. It will normally be installed for the integration of FIDEGAS® teachers in field buses other than those incorporated.
Equipment: MC-ETH-P.

MC-MOD Modbus Module

FIDEGAS® master module that can be attached simultaneously to one or two MODBUS RTU communication buses via RS-485 connection. Allows the connection of up to 15 FIDEGAS® devices with the aim of monitoring information, accessible from each of the same.

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial	**Indications**	Supply, communication input/output
Supply	12-24 Vdc	**Dimensions**	36 (L) x 90 (H) x 58 (W) mm
Input protocol	Serie Fidegas®	**Weight**	100 gr
Protocol Outputs	2 x Modbus RTU		

Complete your gas detection system with the following FIDEG**AS**®
compatible products

Industrial Communication

FIDEGAS® sensors with RS-485 module
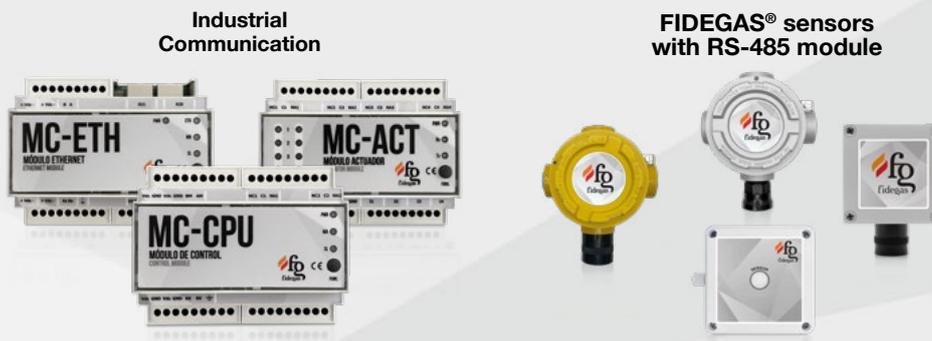
REFERENCE	NAME
03149	MC-MOD-FG MODBUS MODULE
04038	MC-MOD-P MODBUS GATEWAY

MC-ETH Ethernet Module
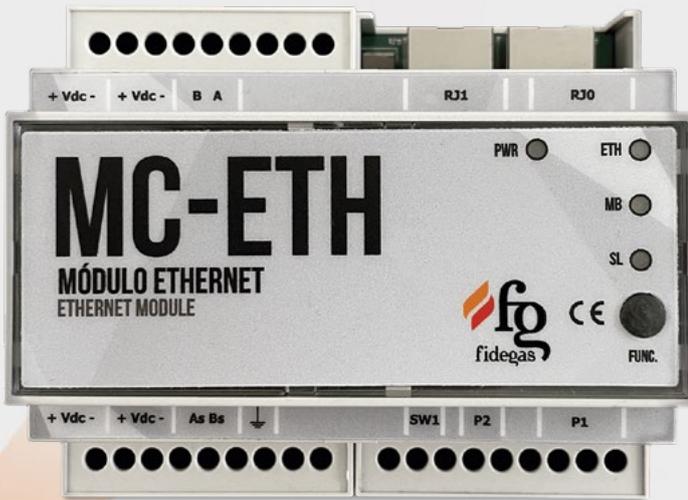
FIDEGAS® master module, the function of which is to integrate up to 15 field bus FIDEGAS® slaves based on Ethernet, mainly Modbus TCP/IP. We also have a Modbus-RTU gateway to Ethernet version.

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial	**Indications**	Supply, communication input/output
Supply	12-24 Vdc	**Dimensions**	106 (L) x 90 (H) x 58 (W) mm
Input protocol	Serie FIDEGAS®	**Weight**	200 gr

Complete your gas detection system with the following FIDEGAS®
compatible products

**Industrial
Communication**
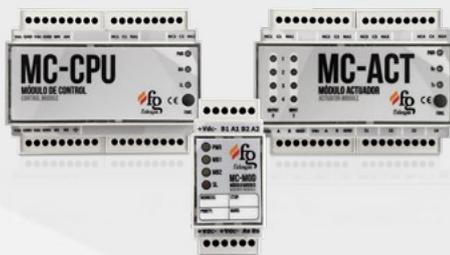
**FIDEGAS® sensors
with RS-485 module**

REFERENCE	TYPE	NAME	CONSUMPTION	PROTOCOL
03552	MC-ETH-MB	MODBUS TCP/IP ETHERNET MODULE	1,5 W	Modbus RTU Modbus TCP/IP
03553	MC-ETH-PMB	MODBUS TCP/IP ETHERNET GATEWAY	1,2 W	Modbus RTU Modbus TCP/IP

MC-ACT Actuator Module

FIDEGAS® slave module with 4 switched Outputs that allows the master to remotely control external devices such as alarms or ventilation. It also has 4 Inputs that allow to act locally on the Outputs. Suitable for DIN rail installation.

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial		**Self-diagnosis**	Automatic fault detection
Supply	12-24 Vdc		**Indications**	Supply, communication, input / output, faults, input status / Outputs
Outputs	4 x LP Conmutadas		**Dimensions**	106 (L) x 90 (H) x 58 (W) mm
Inputs	4 x LP (NA)		**Weight**	100 gr
Communication series	PROTOCOL FIDEGAS®			

Complete your gas detection system with the following FIDEGAS® compatible products

Industrial Communication

FIDEGAS® sensors with RS-485 module

REFERENCE	NAME
03412	MC-ACT ACTUATOR MODULE

MC-CPU Module Control
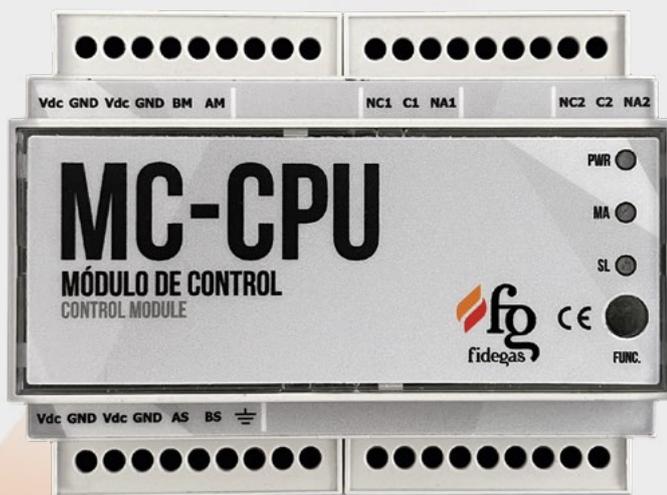
FIDEGAS® module with executive capability that allows it to act as a control unit. It can be configured as a FIDEGAS® master for the control of up to 15 FIDEGAS® SLAVES or as a MODBUS master for connection to other MODBUS slaves. In both cases it has a Modbus RTU Outputs. Suitable for DIN rail installation.

TECHNICAL SPECIFICATIONS

Scope	Commercial and industrial	**Indications**	Supply, Communication, Input / Output, faults, input / input status, Slave status
Supply	12-24 Vdc	**Dimensions**	106 (L) x 90 (H) x 58 (W) mm
Input protocol	Serie FIDEGAS® or Modbus RTU	**Weight**	225 gr
Output Protocol	Modbus RTU	**USB configuration port available**	
Outputs	2 LP Conmmuted	**Configuration software MC-CONFIG.**	

Complete your gas detection system with the following FIDEGAS® compatible products

Industrial Communication
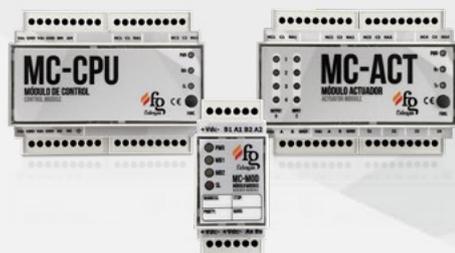
FIDEGAS® sensors with RS-485 module

REFERENCE	NAME
03669	CONTROL MODULE MC-CPU MODBUS-MODBUS
03887	CONTROL MODULE MC-CPU MODBUS-FIDEGAS®

INSTALLATION 1
Description

Example of level 1 standalone installation without control unit. The actuator module outputs are directly controlled by the sensors (through their LP outputs) connected to the module inputs.

This configuration allows the series connection of multiple sensors, therefore allowing one run of cable to be used to interconnect multiple sensors.
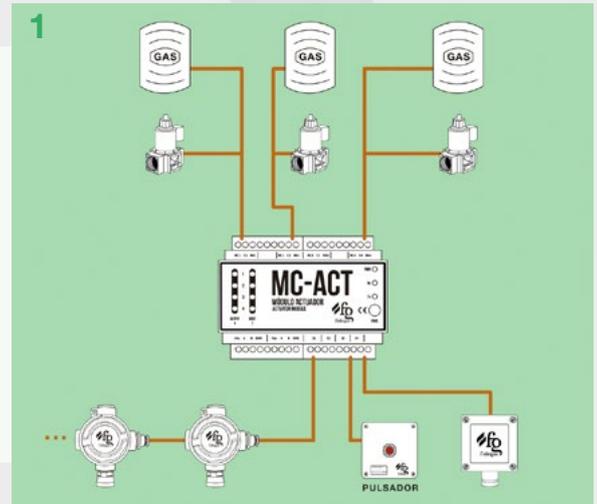
INSTALLATION 2
Description

Example of a level 2 stand-alone INSTALLATION with control unit and without external monitoring.

The MC-CPU module acts as a control unit, controlling several FIDEGAS® SLAVES connected in series to the FIDEGAS® master input port RS-485, and carrying out the executive actions of activation-deactivation of alarms, solenoid valves, etc. The MC-MOD-P module acts as a gateway, allowing a line to be branched.
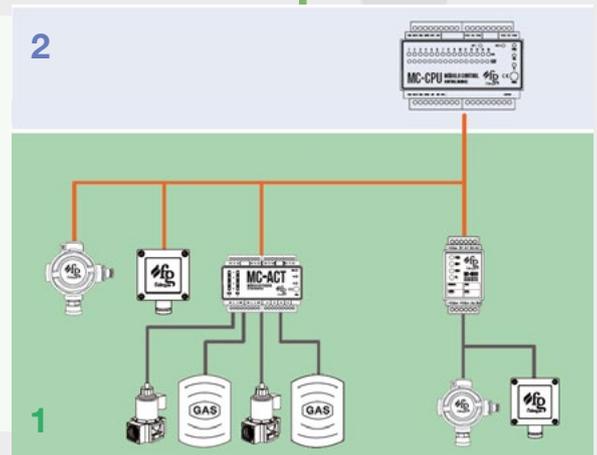
INSTALLATION 3
Description

An example of 3 level 2 autonomous installations with external monitoring to a SCADA through the MC-CPU MODBUS-RTU slave RS-485 ports.

Some level 3 device may be required in certain cases according to the nature of the SCADA for its connection with the MC-CPU controller modules.
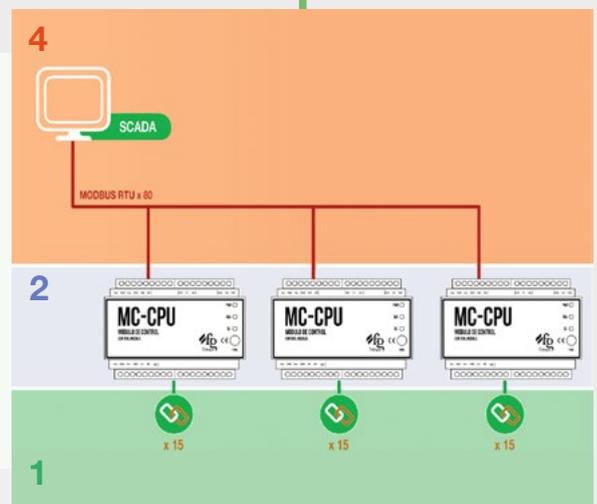
INSTALLATION 4
Description

An example of a level 2 installation composed of 3 MCMOD modbus modules, from which up to 15 FIDEGAS® slaves connected in series to its FIDEGAS MASTER input RS-485 port can be "hung".

One of the MODBUS-RTU slave output RS-485 ports from the modules is used for the on-site monitoring through a plant SCADA (level 4), and the other is used for remote monitoring via a GPRS M100 (Level 3) module that is connected to a SCADA WEB (level 4).

In this case, any executive action that may be required would depend on either the plant SCADA or in GPRS module.
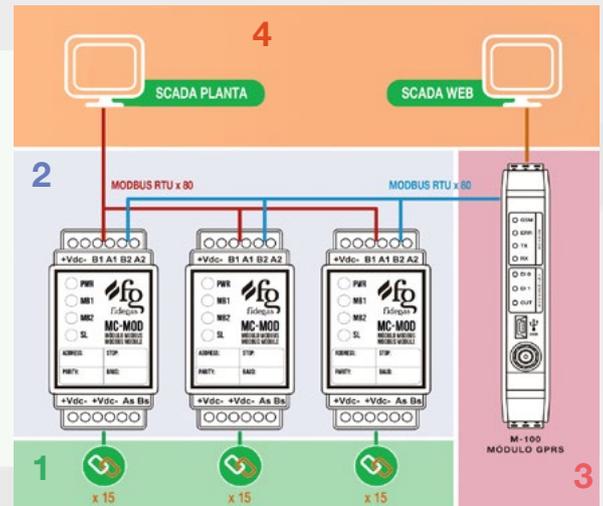
INSTALLATION 5
Description

An example of an installation where the MC-CPU module acts as a level 3 MODBUS master for the control of FIDEGAS®, master, therefore also performing the executive actions.

This system configuration allows for several external connections through the unused communication ports, which would allow their integration into more complex systems.
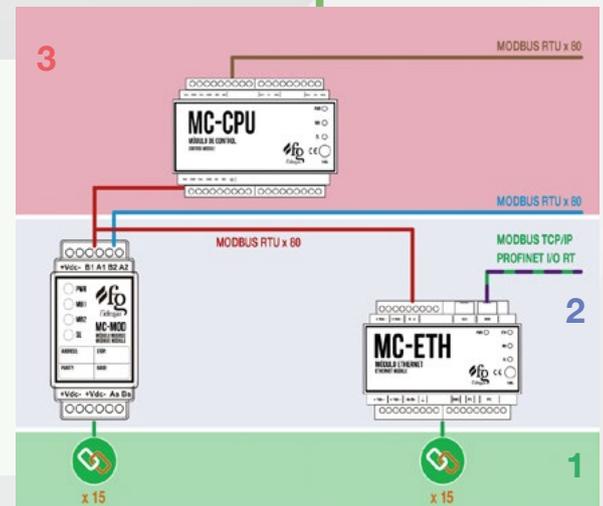
INSTALLATION 6
Description

An example of complex installation with two level 2 installations, one with MC-MOD modules and another with MC-ETH modules.

In the first of these, one of the MODBUS RS-485 slave ports is used for connection to a plant SCADA and the other one for connection to a MC-ETH module as a gateway (level 3) that connects to a remote SCADA via the internet using a router for this purpose.
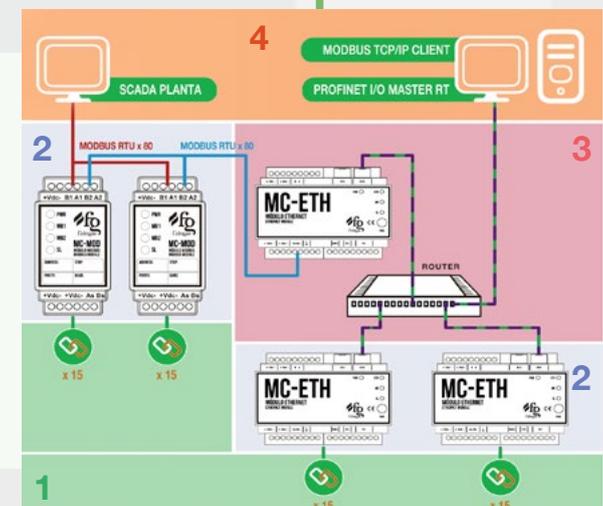
SELECTION GUIDE

CERTIFIED QUALITY
We work towards ensuring personal safety.

	D-194i	D-195i	D-20Xi	D-202	D-30X LW
110-230 VAC	✓	✓	✓		✓
12 VDC		✓	✓	✓	
24 VDC				✓	
FLAMMABLE GASES	✓	✓	✓	✓	✓
CO		✓	✓		✓
STANDARD	EN 50194-1	EN 50194-1/2 EN 50291-1/2	EN 50194-1/2 EN 50291-1/2	EN 50194-1 EN 50194-2	EN 50194-1 EN 50291-1
CERTIFIED	AENOR DETECTORES DE GAS	AENOR DETECTORES DE GAS			

fidegas

D-194i Detector

Certified according to standard EN- 50194-1, for the detection of natural gas or Butane/Propane, thus complying with the requirements of European Directives 2014/30/EU on Electromagnetic Compatibility and 2014/35/EU on Low Voltage. Due to being type A, it is equipped for the automatic shut-off of gas if there were any possible leaks.

TECHNICAL SPECIFICATIONS

Supply	110-230 Vac
Power	10 W
Alarm	17% LEL
Sensor	Catalytic
Useful life	5 years in clean air approx.
Standard	EN 50194-1

Dimensions	198 x 103 x 67 mm
Weight	500 gr

Includes:

**FIDEGAS® test kit
to check proper operation
during:
- Start-up
- Maintenance**

Optional accessories		Page
00194	B-02 battery	6.1
00202	Voice module for D-194i and D-20Xi	6.2
00034	PB-01 lock push button	6.2
00029	RA-01 auxiliary relay	6.2
00007	D-70 automatic shut-off	7.6

REFERENCE	GAS	SENSOR	SCOPE	TEST KIT
00003	Natural	Catalytic	Domestic	00056
00004	Butane / Propane	Catalytic	Domestic	00055

D-195i Detector

Certified according to standard EN- 50194-1/2 for the detection of natural gas or Butane/Propane or Gasoline and certified according to Standard EN 50291-1/2 for the detection of carbon monoxide, thus complying with the requirements of European Directives 2014/30/EU on Electromagnetic Compatibility and 2014/35/EU on Low Voltage. Due to being type A, it is equipped for the automatic shut-off of gas if there were any possible leaks.

TECHNICAL SPECIFICATIONS

Supply	110-230 Vac o 12 Vdc
Outputs	12 Vdc o LP
Useful life	5 years in clean air approx.
Dimensions and Weight	170 x 70 x 45 mm / 350 gr

Includes:

**FIDEGAS® test kit
to check proper operation
during:**
- Start-up
- Maintenance

Optional Accessories		Page
00029	RA-01 auxiliary relay	6.2
00007	D-70 automatic shut-off	7.5

REFERENCE	GAS	ALARM	SENSOR	SUPPLY	POWER	SCOPE	STANDARD	TEST KIT
00005	**Natural**	17% LEL	Integrated catalytic	110-230 Vac	5 W	Domestic	EN 50194-1	00056
00006	**Butane/Propane**	17% LEL	Integrated catalytic	110-230 Vac	5 W	Domestic	EN 50194-1	00055
00102	**Butane/Propane**	17% LEL	Remote catalytic	110-230 Vac	5 W	Domestic	EN 50194-1	00055
00071	**Butane/Propane**	17% LEL	Remote catalytic	12 Vdc	2 W	Boats and caravans	EN 50191-2	00055
00110	**Butane/Propane**	17% LEL	Integrated catalytic	12 Vdc	2 W	Boats and caravans	EN 50194-1/2	00055
00081	**Gasoline**	17% LEL	Remote catalytic	12 Vdc	2 W	Boats and caravans	EN 50194-1/2	00174
00095	**CO**	50 / 100 / 300 ppm	Electrochemical	110-230 Vac	5 W	Domestic	EN 50291-1	04479
03286	**CO**	50 / 100 / 300 ppm	Electrochemical	12 Vdc	2 W	Boats and caravans	EN 50291-1/2	04479

D-20Xi Detector

Designed in accordance with standard EN 50194-1/2 for the detection of natural gas, butane/propane or petrol, and certified according to standard EN 50291-1/2 for the detection of carbon monoxide, thus complying with the requirements of European Directives 2014/30/EU Electromagnetic Compatibility and 2014/35/EU Low Voltage. As it is Type A, it is prepared for automatic gas shut-off in the event of a leak. Compatible with KNX systems via the KNX D-20Xi module.

TECHNICAL SPECIFICATIONS

Supply	110 - 230 Vac o 12 Vdc	**Weight**	175 gr
Alarm CO	50 / 100 / 300 ppm	**Standard**	EN 50194-1/2 and EN 50291-1/2
Alarm GAS	17% LEL		
Outputs	2 x LP de alarma, avería y fin de vida	**Includes:**	
Useful life	5 years in clean air approx.	**FIDEGAS® test kit** to check proper operation during: - Start-up - Maintenance	
Dimensions	135 x 95 x 25 mm		

Optional Accessories		Page
00202	Voice module for D-194i and D-20Xi	6.2
02231	KNX D-20Xi module	6.2
00007	D-70 automatic shut-off	7.5

REFERENCE	GAS	SENSOR	SUPPLY	POWER	TEST KIT
00503	CO + Butane / Propane	Electrochemical and remote catalytic	12 Vdc	2 W	04479 00055
00506	CO + Butane / Propane	Electrochemical and remote catalytic	110-230 Vac	5 W	04479 00055
03287	CO + Gasoline	Electrochemical and remote catalytic	12 Vdc	2 W	04479 00174
00501	CO + Natural	Electrochemical and integrated catalytic	110-230 Vac	5 W	04479 00056

D-202 Detector

Detects the presence of Natural Gas or Butane/Propane and is equipped for the automatic shut-off of gas in the event of any leak, with the highest degree of safety and precision, thanks to its design, which strictly follows the directives of Standard EN 50194-1/2, in compliance with the requirements of the European Directives 2014/30/EU on Electromagnetic Compatibility and 2014/35/EU on Low Voltage.

TECHNICAL SPECIFICATIONS

Supply	12-24 Vac
Power	1,5 W (12 Vdc) / 2,5 W (24Vdc)
Alarm	20% LEL
Alarm output	LP (NC)
Fault output	LP (NC)

Useful life	Approximately 5 years in clean air.
Dimensions and Weight with surface box	84 x 84 x 51 mm / 125 gr
Dimensions and Weight without surface box	84 x 84 x 42 mm / 70 gr

Includes:

FIDEGAS® test kit
to check proper operation during:
- Start-up
- Maintenance

Optional Accessories		Page
00026	FA-20Xi power source	6.1
00007	D-70 automatic shut-off	7.5

REFERENCE	GAS	SENSOR	SCOPE	TEST KIT
00191	Natural	Integrated catalytic	Domestic	00056
00195	Butane/Propane	Integrated catalytic	Domestic	00055
00319	Butane/Propane	Remote catalytic	Boats and caravans	00055
00154	Gasoline	Remote catalytic	Boats and caravans	00174

D-30X LW Detector

Gas detector with radio transmission for integration into LoRaWAN networks. It detects the presence of CO gas and combustible gases such as: natural gas, Butane/Propane, hydrogen. Alarm, breakdown and end-of-life indication for each sensor. Replaceable sensors.

TECHNICAL SPECIFICATIONS

Supply	110-230 Vac	**Dimensions**	100 x 100 x 53 mm
Power	5 W	**Weight**	200 gr
Alarm CO	50 / 100 / 300 ppm	**Standard**	EN 50194-1 and EN 50291-1
Alarm GAS	15% LEL	**Alarm, test and end-of-life warning**	
Sensor	Electrochemical and catalytic	**Spare part available for replacement.**	
Useful life	5 years in clean air approx.		
Connectivity	Radio LoRaWan Modbus RTU (optional)		

GAS	REFERENCE	BAND	SPARE	TEST KIT
CO + Natural	04003	868 MHz	04012	00056 04479
	04004	915 MHz		

* For other gases consult.

6

HIGH ADDED VALUE ACCESSORIES
For domestic range of detectors

Power supply source **FA-20X**

Reference	00026
Input voltage	230 Vac
Output voltage	12 Vdc that can be short circuited
Power	5 W
Dimensions / weight	84 x 84 x 51 mm / 125 gr with surface box
Dimensions / weight	84 x 84 x 42 mm / 70 gr without surface box

Battery **B-02i**

Reference	00194
Voltage	8,4 Vdc
Capacity	1,6 Ah
Dimensions	100 x 50 x 15 mm
Weight	258 gr
Complies with Directive 2008/103/EC	

Voice module **MV-20Xi-194i**

Reference	00202

Suitable for people with disabilities: optical, acoustic and voice recorded messages. Voice recorded messages module for D-194i and D-20Xi gas detectors.

Messages: alarm, breakdown, maintenance and end of life.

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Module **KNX D-20Xi**

Reference	02231

Module for integrating the D-20Xi gas detector in KNX IBOX-KNX-FDGD20X domestic systems.

Lock push button **PB-01**

Reference	00034
Dimensions	90 x 90 x 40 mm
Weight	125 gr

Normally closed push button valid for locking the alarm output in detectors and manually reset them.

Auxiliary relay **RA-01**

Reference	00029
Coil voltage	12 Vdc
Contacts	2 x NC-C-NA
Maximum Switching	250 Vac / 5 A

Auxiliary relay that extends the output options for domestic detector: connection of 230 Vac solenoid valves, etc.
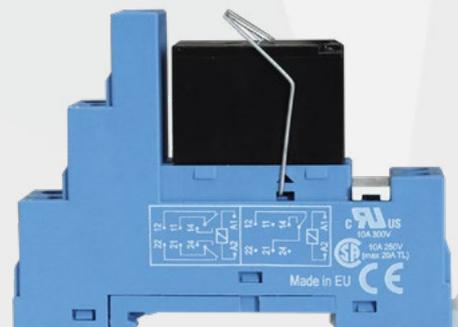
Gas Meter M-1000

Fixed installation gas meter. Configurable optical alarm indication. Includes software for configuration and data logging, where it is possible to monitor the measured gas concentration and the temperature and relative humidity of the environment. Ideal application for indoor air quality measurement. Modbus RTU version available for integration in intelligent monitoring systems.

TECHNICAL SPECIFICATIONS

Supply	5 vdc
Sensor	Infrared NDIR
Alarm	Software configurable
Dimensions	51 (W) x 51 (H) x 25,5 (fund) mm
Weight	60 gr

Free software available for data logging and configuration.

GAS	SENSOR	RANGE	USEFUL LIFE	PORT	REFERENCE	TEST KIT
CO_2	Infrarrojo	0-10.000 ppm	10 years approx.	USB	04001	04481
				RS-485	04016	
CO	Electrochemical	0-500 ppm	2 years approx.	RS-485	04053	**

Gas Meter M-1100

Gas meter with fixed installation or battery. It has an easy-to-read LCD screen to indicate the gas concentration measured in real time. Configurable optical acoustic alarm indication. Includes software for configuration and data recording. Ideal application for indoor air quality measurement.

ESPECIFICACIONES TÉCNICAS

Supply	5 vdc
Sensor	Infrared NDIR
Alarm	Software configurable
Useful life	10 years approx.
Dimensions	159 (W) x 78 (H) x 47 (fund) mm
Weight	225 gr

Free software available for data logging and configuration.

GAS	SENSOR	RANGE	BATTERY	REFERENCE
CO_2	Infrares	0-10.000 ppm	YES	03989
			NO	04014

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FIDEGAS® IAQ KIT monitoring system

System that provides the value of CO2 concentration, temperature and humidity in the environment as indicators of air quality. It has two configurable alarm points, alarm logging and data storage in external USB memory.

TECHNICAL SPECIFICATIONS

Supply	110-230 Vac - 50/60 Hz	**Screen**	7" TFT
Detection	Gas meter M-1000 RS-485 CO_2 (0-10.000 ppm)	**Dimensions**	204 x 150 x 34 mm
Alarm configurable	Low level: 950 ppm High level: 1250 ppm	**Weight**	500 gr
		Calibration certificate Includesd.	

REFERENCE	
04032	FIDEGAS® IAQ KIT Monitoring System

Indoor monitoring system FIDEGAS® IAQ

The Fidegas® IAQ indoor monitoring system is based on the detection of target gases that determine the indoor air quality. Based on the modular industrial communication system and the M-1000 gas meter range it is possible to manage up to 50 sensors. The connection to the gas meters via RS-485 is plug-and-play.

Access to the system through its Modbus RTU outputs.

TECHNICAL SPECIFICATIONS

Supply	110-230 Vac - 50/60 Hz	**Indications**	Sinoptic on touch screen
Outputs	Maximum 60 alarm outputs 1 alarm silence output 1 freely selectable output	**Actions**	Max. 50 performances per magnitude (gas concentration, temperature and humidity)
Number of sensors	Max. 50 Sensors	**Degree of protection**	IP 66
Dimensions	425 x 325 x 180 mm	**Free configuration software available**	

REFERENCE	
04033	Indoor monitoring system FIDEGAS® IAQ

Portable detectors

MGT

SGT

Range of personal portable detectors for rapid hazard detection. It has an easy-to-read LCD screen and navigation menu for information display. Includes software for setting device values and programming alarms. Warning of alerts by red led light, vibration and sound. ATEX marking for work in explosive environments.Multigas (MGT) and Monogas (SGT) versions available.

TECHNICAL SPECIFICATIONS

	MGT
Supply	Rechargeable battery
Alarm	Selectable via software
Useful life	According to Sensor with recommended calibrations every 6 months
Enclosure	IP 67
Dimensions	60 (W) x 118 (H) 40 (L) mm
Weight	240 gr
Certification	ATEX Ex iaIIC T4Ga

	SGT
Supply	Lithium battery
Alarm	Selectable via software
Useful life	2 continuous years without replacing sensor or calibrations
Enclosure	IP 67
Dimensions	54 (W) x 91(H) x 32 (L) mm
Weight	93 gr
Certification	ATEX EX iaIIC T4Ga

The H2S and CO models incorporate a hibernation mode that allows to extend the battery life up to an additional year (IR LINK is required).

Ref. **03839**

MGT PORTABLE MULTIGAS DETECTOR

REFERENCE	GAS	SENSOR	RANGE	RESOLUTION	USEFUL LIFE
	Combustible	Catalytic	0-100% LEL	1% LEL	> 2 Years
03833	**O_2**	Electrochemical	0-30% v/v	0,1% v/v	< 2 Years
	CO	Electrochemical	0-500 ppm	1 ppm	> 2 Years
	H_2S	Electrochemical	0-100 ppm	1 ppm	> 2 Years

SGT PORTABLE MONOGAS DETECTOR

REFERENCE	GAS	SENSOR	RANGE	RESOLUTION
03830	**O_2**	Electrochemical	0-30% v/v	0,1% v/v
03831	**CO**	Electrochemical	0-500 ppm	1 ppm
03832	**H_2S**	Electrochemical	0-100 ppm	1 ppm

AV-02 warning system

Device that manages the installation's gas needs via SMS messages or in an application via GPRS connection. A pressure switch controls the pressure in the installation, making the Gas Request when necessary. A push button allows you to request technical assistance on the configured telephone.

TECHNICAL SPECIFICATIONS

Supply	230 Vac	**Signals**	Technical assistance Order confirmed Gas pressure below 0.8 bar Gas pressure above 1.5 bar GSM signal level
Dimensions	160 x 105 x 60 mm	**Includes pressure switch**	Optional pressure transducer also available
Weight	900 gr	**SIM card not Includesd**	

REFERENCE	
00062	AV-02 warning system

ME-01 Magiscope

Remote low pressure warning device in domestic gas lines, to allow users to manage the replacement of the bottles before they fully run out.

TECHNICAL SPECIFICATIONS

Supply	3 Vdc (2 X 1.5 V AA batteries)	**Indications**	Service pressure > 1.2 Kg/cm2
Dimensions	125 x 70 x 25 mm		Low pressure < 0.8 Kg/cm2
Weight	350 gr		Battery low (BAT)
		Includes pressure switch	

REFERENCE	
00409	ME-01 Magiscope

D-70 automatic locking

Automatic gas shut-off device for LPG cylinders with manual reset by actuating the shut-off flap. It is controlled by a detector with executive Outputs, TYPE A (D-194i, D-195i, D-20Xi).

TECHNICAL SPECIFICATIONS

Supply	12 Vdc	Consumption	160 mA / 1,92 W
Dimensions	165 x 44 mm	Certificate	REPSOL - GE 97157

Compatible with
Domestics Detectors

REFERENCE	
00007	D-70 automatic locking

CM-01 Electronic Switch

Device designed to comply with RD 1027/2007 RITE. Its function is based on detecting when the boiler/heater is in operation and prevents the kitchen extractor fan/smoke hood from being used at that moment, avoiding a depression and most probably the formation of CO in the atmosphere. Tested by LCOE (ENAC accredited) in compliance with the standards mentioned in its user manual.

TECHNICAL SPECIFICATIONS

Supply	230 Vac	Dimensions	125 x 70 x 45 mm
Optic sensor	Infrared cell (<70º C)	Weight	150 gr
Output for extractor	Consumtion maximum 3.2 A		

REFERENCE	
00231	CM-01 electronic switch

CERTIFIED QUALITY AND SAFETY

AENOR COMPANY

AENOR ATEX

LOM ATEX

AENOR DOMESTICS

AENOR RECREATIONAL

VEHICLES

WWW.FIDEGAS.COM

AENOR

Certificado del Sistema de Gestión de la Calidad

AENOR
GESTIÓN
DE LA CALIDAD
ISO 9001

ER-0908/2000

AENOR certifica que la organización

COMERCIAL DE APLICACIONES ELECTRONICAS, S.L.

dispone de un sistema de gestión de la calidad conforme con la Norma UNE-EN ISO 9001:2015

para las actividades: El diseño, la producción, la reparación y la comercialización de: aparatos de detección, medida y sistemas de corte automático para instalaciones de gases combustibles (hidrógeno, gas natural, butano, propano y otros gases orgánicos).

que se realizan en: PO UBARBURU 12 MODULO 6-7 POLIGONO 27 20014 DONOSTIA - SAN SEBASTIAN (GIPUZKOA)

Primera Emisión: **2000-07-17**
Última Emisión: **2025-07-06**

Expiración: **2028-07-06**

Rafael GARCÍA MEIRO
CEO

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Tel. (+34) 91 432 60 00.- www.aenor.com

IAF   ENAC   IQNET

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AENOR ATEX

AENOR
Confía

Certificado AENOR de Producto
AENOR Product Certificate

030/001429

AENOR certifica que | AENOR certifies that

COMERCIAL DE APLICACIONES ELECTRONICAS, S.L.

Domicilio social / Registered office	PO UBARBURU, 12 20014 SAN SEBASTIAN (Gipuzkoa - España)
suministra / supplies	**Sistema de detección de gas combustible** **Fuel gas detection system**
conformes con / in compliance with	UNE-EN 60079-29-1:2017 (EN 60079-29-1:2016)
Referencias / References	Detalladas en el Anexo al Certificado / Specified in Annex to the Certificate
Centro de producción / Production site	PO UBARBURU, 12 20014 SAN SEBASTIAN (Guipuzcoa - España)
Esquema de evaluación Assessment scheme	Para conceder este Certificado, AENOR ha ensayado el producto y ha comprobado el sistema de la calidad aplicado para su elaboración. AENOR realiza estas actividades periódicamente mientras el Certificado no haya sido anulado, según se establece en el Reglamento Particular RP 030.17. In order to grant this Certificate, AENOR has tested the product and has verified the quality system implemented for its manufacture. AENOR performs these tasks periodically while the Certificate has not been cancelled, in accordance with Specific Rules RP 030.17.

Fecha de emisión / First issued on 2001-06-01
Fecha de última emisión / Last issued 2022-12-19
Fecha de expiración / Validity date 2027-12-19

Rafael GARCÍA MEIRO
Director General / CEO

AENOR INTERNACIONAL S.A.U.
Génova, 6. 28004 Madrid. España
Tel. 91 432 60 00.- www.aenor.com

Para montar con las sondas / To mount with the probes	Nº de sondas conectables / No. of connectable probes
S/3-2-..	2
S/3-2..	4
S/3-2..	8

www.fidegas.com

LABORATORIO OFICIAL J. M. MADARIAGA

(A1) **ANEXO** *(ANNEX)*

(A2) **Notificación del Aseguramiento de la Calidad del Producto:** **LOM 03ATEX9122**
Product Quality Assurance Notification

(A3) **Alcance de la Notificación**
Scope of the Notification

A3.1 Tipos de materiales *(type of materials)*

Sistema de medida de concentración de gases / *Gas concentration measurement system*

A3.2 Modos de protección y/o sistemas de protección *(types of protection or protective systems)*

Envolvente antideflagrante / *Flameproof enclosure*

(A4) **Listado de Certificados de Examen UE/CE de Tipo cubiertos por la Notificación:**
List of EU/EC Type Examination Certificates covered by the Notification

Material *Material*	Código de protección *Protection code*	Número de certificado *Certificate number*
Sistema de medida de concentración de gases *Gas concentration measurement system* *Sensor type S/3-2 and control station types CA-**	db	LOM 03ATEX2095X

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Pág. 2/2

M. MADARIAGA

DE LA CALIDAD DEL

Atmósferas Potencialmente Explosivas.

...plosive Atmospheres. Module E of Directive 2014/34/EU.

Anexo adjunto a esta Notificación.
...this Notification.

...cas, S.L.

– mod 6 - 7
...n. SPAIN

...cado nº 0163 para el Módulo E, de conformidad
...uropeo y del Consejo, de 26 de febrero de 2014,
...bección final y ensayo del producto que cumple

...in accordance with Article 17 of Directive 2014/34/EU of
...manufacturer has a quality system for the final inspection

...M 24.04212, emitido en fecha 2024-06-18. La
...confidencial **24.141D**.
...los requisitos del Módulo E.
...alidad forman parte de esta Notificación.
...8. The information related to this assessment is collected
...cturer no longer satisfies the requirements of Module E.

...a si el fabricante no satisface el seguimiento del
...er does not satisfy the surveillance of the product quality

...E, el marcado CE deberá estar seguido por la
...do que interviene en la fase de control de la

...163 of LOM shall follow the CE mark as the Notified Body

ÑUELA

Firmado digitalmente por VAZQUEZ VIÑUELA NATALIA - 11077954G
Nombre de reconocimiento (DN): c=ES, serialNumber=IDCES-11077954G, givenName=NATALIA, sn=VAZQUEZ VIÑUELA, cn=VAZQUEZ VIÑUELA NATALIA - 11077954G
Fecha: 2024.07.31 12:52:49 +02'00'

Pág. 1 / 2

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ENAC
CERTIFICACIÓN
ISO 17065
Nº193 / C-PE060

✉ Eric Kandel, 1 – 28906 Getafe (MADRID) • ☎ (34) 910 679 825 • 🖥 lom.lom@upm.es

fidegas

LABORATORIO OFICIAL J. M. MADARIAGA

(Ex)

(1) **CERTIFICADO DE EXAMEN CE DE TIPO**

(2) Equipos y sistemas de protección destinados a ser utilizados en atmósferas potencialmente explosivas. Directiva 94/9/CE

(3) Certificado de Examen CE de Tipo **LOM 03ATEX2095**

(4) Equipo o sistema de protección — Sistema de medida de concentración de gases Marca FIDEGAS, sensor tipo S/3-2, centrales tipos CA-*

(5) Solicitante — Comercial de Aplicaciones Electrónicas, S.L. (CAE, S.L.)

(6) Dirección — Pº Ubarburu, 12
20014 SAN SEBASTIÁN
ESPAÑA

(7) Este equipo o sistema de protección y sus variantes eventualmente aceptadas está descrito en el anexo del presente certificado y en los documentos descriptivos citados en dicho anexo

(8) El Laboratorio Oficial J.M. Madariaga (LOM), organismo notificado bajo la referencia nº 0163, conforme al artículo 9 de la Directiva 94/9/CE del Parlamento Europeo y del Consejo del 23 de Marzo de 1994, certifica que este equipo o sistema de protección es conforme a los Requisitos Esenciales de Seguridad y Salud relativos al diseño y construcción de equipos y sistemas destinados a ser utilizados en atmósferas potencialmente explosivas, indicados en el Anexo II de la Directiva. La verificaciones y ensayos se recogen en el protocolo confidencial LOM 03.143 XP

(9) El cumplimiento con los Requisitos Esenciales de Seguridad y Salud está basado en la conformidad a los siguientes documentos:
— Normas   EN 50014:1997 + A1:1999 + A2:1999
EN 50018:2000 + A1:2002
EN 50054:1998
EN 50057:1998

(10) Si el signo X aparece después del número de certificado indica que este material o sistema de protección está sometido a las condiciones especiales de utilización que figuran en el anexo del presente certificado.

(11) Este Certificado de Examen CE de Tipo se refiere únicamente al diseño y construcción del equipo o sistema de protección especificado, conforme a la Directiva 94/9/CE. Podrán ser aplicables exigencias suplementarias de esta Directiva para la fabricación y suministro de este equipo o sistema de protección. Éstas no están incluidas en este certificado.

(12) El marcado del equipo o sistema de protección deberá incluir, entre otras indicaciones relevantes, lo siguiente:

(Ex) II 2G   EEx d IIC T6

(Ex) II (2)G

Madrid, 10 de julio de 2003

Carlos Fernández Ramón
DIRECTOR DEL LABORATORIO

Angel Vega Remesal
Responsable del área ATEX

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Pág. 1/2

ENAC
INSPECCIÓN
Nº 23/EI037

UNIVERSIDAD POLITÉCNICA DE MADRID
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA
(Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29 -)
Alenza, 2 - 28003-MADRID • ☎ (34) 91 4421366/ 91 3367009 • Fax.(34) 91 4419933 • ✉ lom@lom.upm.es

---

...MADARIAGA

Código de marcado
(Ex) II 2G   EEx d IIC T6
(Ex) II (2)G

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Pág. 2/2

LABORATORIO OFICIAL J. M. MADARIAGA

(1) **SUPLEMENTO DE CERTIFICADO DE EXAMEN CE DE TIPO**

(2) Equipos y sistemas de protección destinados a ser utilizados en atmósferas potencialmente explosivas. Directiva 94/9/CE

(3) Suplemento nº **1** del Certificado de Examen CE de Tipo **LOM 03ATEX2095 X**

(4) Equipo o sistema de protección   Sistema de medida de concentración de gases
Marca FIDEGAS, sensor tipo S/3-2, centrales tipos CA-*

(5) Solicitante   Comercial de Aplicaciones Electrónicas, S.L. (CAE, S.L.)

(6) Dirección   Paseo Ubarburu, 12
20014 SAN SEBASTIÁN
ESPAÑA

(7) Protocolo de ensayos nº: **LOM 07.102 EP**

(8) Variaciones incluidas en este certificado

     a) Modificación del sistema para cumplir con los requisitos de las normas EN 61779-1:2000 + A11:2004 y EN 61779-4:2000
     b) Actualización a las normas de modo de protección EN 60079-0:2006 y EN 60079-1:2007
     c) Construcción alternativa del sensor remoto utilizando una envolvente tipoXD-JB85 de Limatherm, con certificado de componente FTZU 05 ATEX 0262 U.

(9) Variaciones en el marcado

     Sensor remoto FIDEGAS S/3-2   ⟨Ex⟩   II 2 G Ex d IIC T6 EN 61779-4

     Centrales FIDEGAS CA-*   ⟨Ex⟩   II (2)G EN 61779-4

(10) Variaciones en las condiciones especiales para una utilización segura

El cable que conecta la central y el sensor remoto deberá del tipo e instalado de acuerdo al manual de usuario proporcionado por el fabricante.

(11) Documentos descriptivos

	Rev.	Fecha
- Manual técnico nº S/3-2	9	2008-07
- Manual técnico nº CA-2/4/8	9	2008-07

OFICIAL

Madrid, 24 de julio de 2008

Carlos Fernández Ramón
DIRECTOR DEL LABORATORIO

Angel Vega Remesal
Responsable del Área ATEX

Este suplemento deberá formar parte inseparable del certificado base **LOM 03ATEX2095**

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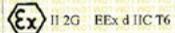
RCPCER 07.4/2

UNIVERSIDAD POLITÉCNICA DE MADRID
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA
(Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)

✉ Alenza, 1 - 28003 MADRID • ☎ (34) 91 4421366 / 91 3367009 • 📠 (34) 91 4419933 • 💻 lom@lom.upm.es

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LOM ATEX

(1) **SUPLEMENTO DE CERTIFICADO DE EXAMEN CE DE TIPO**

(2) Equipos y sistemas de protección destinados a ser utilizados en atmósferas potencialmente explosivas.
Directiva 94/9/CE

(3) Suplemento nº **2** del Certificado de Examen CE de Tipo   **LOM 03ATEX2095 X**

(4) Equipo o sistema de protección   Sistema de medida de concentración de gases
Marca FIDEGAS, sensor tipo S/3-2, centrales tipos CA-*

(5) Fabricante   Comercial de Aplicaciones Electrónicas, S.L. (CAE, S.L.)

(6) Dirección   Paseo Ubarburu, 12
20014 SAN SEBASTIÁN
ESPAÑA

(7) Protocolo de ensayos nº: **LOM 10.234 QP**

(8) Variaciones incluidas en este certificado

Actualización en la evaluación a las normas EN 60079-29-1:2007 y EN 60079-0:2009

(9) Variaciones en el marcado

Sensor remoto FIDEGAS S/3-2   ⟨Ex⟩   II 2 G   Ex d IIC T6 Gb   EN 60079-29-1

Centrales FIDEGAS CA-*   ⟨Ex⟩   II (2)G   EN 60079-29-1

(10) Variaciones en las condiciones especiales para una utilización segura

Se mantienen las condiciones del certificado base y suplemento 1.

(11) Documentos descriptivos

	Rev.	Fecha
- Manual técnico nº S/3-2	13	2011-04
- Manual técnico nº CA-2/4/8	10	2011-04

Madrid, 2011-03-15

Carlos Fernández Ramón
DIRECTOR DEL LABORATORIO

Angel Vega Remesal
Responsable del Área ATEX

Este suplemento deberá formar parte inseparable del certificado base **LOM 03ATEX2095 X**

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www.fidegas.com

LABORATORIO OFICIAL J. M. MADARIAGA

(1) CERTIFICADO DE EXAMEN CE DE TIPO

(2) Equipos y sistemas de protección destinados a ser utilizados en atmósferas potencialmente explosivas. Directiva 94/9/CE

(3) Certificado de Examen CE de Tipo **LOM 03ATEX2095**

(4) Equipo o sistema de protección
Sistema de medida de concentración de gases
Marca FIDEGAS, sensor tipo S/3-2, centrales tipos CA-*

(5) Solicitante
Comercial de Aplicaciones Electrónicas, S.L. (CAE, S.L.)

(6) Dirección
Pº Ubarburu, 12
20014 SAN SEBASTIÁN
ESPAÑA

(7) Este equipo o sistema de protección y sus variantes eventualmente aceptadas está descrito en el anexo del presente certificado y en los documentos descriptivos citados en dicho anexo

(8) El Laboratorio Oficial J.M. Madariaga (LOM), organismo notificado bajo la referencia nº 0163, conforme al artículo 9 de la Directiva 94/9/CE del Parlamento Europeo y del Consejo del 23 de Marzo de 1994, certifica que este equipo o sistema de protección es conforme a los Requisitos Esenciales de Seguridad y Salud relativos al diseño y construcción de equipos y sistemas destinados a ser utilizados en atmósferas potencialmente explosivas, indicados en el Anexo II de la Directiva. La verificaciones y ensayos se recogen en el protocolo confidencial LOM 03.143 XP
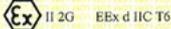
(9) El cumplimiento con los Requisitos Esenciales de Seguridad y Salud está basado en la conformidad a los siguientes documentos:
—   Normas   EN 50014:1997 + A1:1999 + A2:1999
              EN 50018:2000 + A1:2002
              EN 50054:1998
              EN 50057:1998

(10) Si el signo X aparece después del número de certificado indica que este material o sistema de protección está sometido a las condiciones especiales de utilización que figuran en el anexo del presente certificado.

(11) Este Certificado de Examen CE de Tipo se refiere únicamente al diseño y construcción del equipo o sistema de protección especificado, conforme a la Directiva 94/9/CE. Podrán ser aplicables exigencias suplementarias de esta Directiva para la fabricación y suministro de este equipo o sistema de protección. Éstas no están incluidas en este certificado.

(12) El marcado del equipo o sistema de protección deberá incluir, entre otras indicaciones relevantes, lo siguiente:

Ex II 2G   EEx d IIC T6

Ex II (2)G

Madrid, 10 de julio de 2003

Carlos Fernández Ramón
DIRECTOR DEL LABORATORIO

Angel Vega Remesal
Responsable del área ATEX

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Pág. 1/2

UNIVERSIDAD POLITÉCNICA DE MADRID
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA
(Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)
Alenza, 2 - 28003-MADRID • ☎ (34) 91 4421366/ 91 3367009 • Fax.(34) 91 4419933 • ✉ lom@lom.upm.es

ENAC
INSPECCIÓN
Nº 33/EI037

...MADARIAGA

	Código de marcado
...ses ...tideflagrante ...ntre 0% y	Ex II 2G EEx d IIC T6
...sta para su ...delos para ...A con dos ...8), con ...%, 20% y 100%	
...a, alarma y ...todo/nada ...encial.	Ex II (2)G
...oniendo de una ...n en ausencia de	

...as S/3-2 consistente en un recipiente a presión con
...ración del 40% del límite inferior de explosividad
...kit esta de acuerdo con el apartado 6 de las normas

...están cubiertos por aplicación de las normas que

...o las sondas S/3-2 se suministran por separado.

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Pág. 2/2

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AENOR

Certificado AENOR de Producto
AENOR Product Certificate

030/002387

AENOR certifica que | AENOR certifies that

COMERCIAL DE APLICACIONES ELECTRONICAS, S.L.

Domicilio social / Registered office	PO UBARBURU, 12 20014 SAN SEBASTIAN (Guipúzcoa - España)
Suministra Supplies	Detector de gases combustibles en locales de uso doméstico Combustible gas detector in premises for domestic use
Conformes con / In compliance with	UNE-EN 50194-1:2011 (EN 50194-1:2009)
Referencias References	Detalladas en el Anexo al Certificado Specified in Annex to the Certificate
Centro de producción / Production site	PO UBARBURU, 12 20014 SAN SEBASTIAN (Guipúzcoa - España)
Esquema de evaluación Assessment scheme	Para conceder este Certificado, AENOR ha e... comprobado el sistema de la calidad aplicado... realiza estas actividades periódicamente mi... sido anulado, según se establece en el Regla... in order to grant this Certificate. AENOR has... verified the quality system implemented fo... performs these tasks periodically while the... cancelled, in accordance with Specific Rules...

Este certificado anula al 030/002387, de fe...
This certificate supersedes 030/002387, da...

Primera emisión / First issued	2015-05-05
Modificación / Modified	2024-04-15
Expiración / Validity	2025-05-05

AENOR

Certificado AENOR de Producto
AENOR Product Certificate

030/002387

Anexo al Certificado
Annex to Certificate

Marca Comercial / Trade mark: FIDEGAS

Referencia / Reference	Gases detectados / Gases detected	Límite de detección (LIE) / Detection limit	Tensión de alimentación / Supply voltage	Aparato tipo / Device type
D-194i	Gas Natural (GN) y GLP / Natural Gas (NG) and LPG	17%	230 V~	Tipo A
D-195i	Gas Natural (GN) y GLP / Natural Gas (NG) and LPG	17%	230 V~	Tipo A

Primera emisión / First issued	2015-05-05
Modificación / Modified	2024-04-15
Expiración / Validity	2025-05-05

AENOR CONFÍA S.A.U.
Génova, 6. 28004 Madrid. España
Tel. 91 432 60 00.- www.aenor.com

1/1

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LABORATORIO OFICIAL J. M. MADARIAGA

(1) SUPLEMENTO DE CERTIFICADO DE EXAMEN CE DE TIPO

(2) Equipos y sistemas de protección destinados a ser utilizados en atmósferas potencialmente explosivas.
Directiva 94/9/CE

(3) Suplemento nº **1** del Certificado de Examen CE de Tipo   **LOM 03ATEX2095 X**

(4) Equipo o sistema de protección   Sistema de medida de concentración de gases
Marca FIDEGAS, sensor tipo S/3-2, centrales tipos CA-*

(5) Solicitante   Comercial de Aplicaciones Electrónicas, S.L. (CAE, S.L.)

(6) Dirección   Paseo Ubarburu, 12
20014 SAN SEBASTIÁN
ESPAÑA

(7) Protocolo de ensayos nº: **LOM 07.102 EP**

(8) Variaciones incluidas en este certificado

    a)   Modificación del sistema para cumplir con los requisitos de las normas EN 61779-1:2000 + A11:2004 y EN 61779-4:2000

    b)   Actualización a las normas de modo de protección EN 60079-0:2006 y EN 60079-1:2007

    c)   Construcción alternativa del sensor remoto utilizando una envolvente tipoXD-JB85 de Limatherm, con certificado de componente ETZU 05 ATEX 0262 U

(9) Variaciones en el marcado

    Sensor remoto
    FIDEGAS S/3-2   〈Ex〉   II 2 G Ex d IIC T6 EN 61779-4

    Centrales
    FIDEGAS CA-*   〈Ex〉   II (2)G EN 61779-4

(10) Variaciones en las condiciones especiales para una utilización segura

El cable que conecta la central y el sensor remoto deberá del tipo e instalado de acuerdo al manual de usuario proporcionado por el fabricante.

(11) Documentos descriptivos

	Rev.	Fecha
- Manual técnico nº S/3-2	9	2008-07
- Manual técnico nº CA-2/4/8	9	2008-07

OFICIAL
J.M. MADARIAGA
LOM

Madrid, 24 de julio de 2008

Carlos Fernández Ramón
DIRECTOR DEL LABORATORIO

Angel Vega Remesal
Responsable del Área ATEX

Este suplemento deberá formar parte inseparable del certificado base **LOM 03ATEX2095**

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UNIVERSIDAD POLITÉCNICA DE MADRID
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA
(Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)

✉ Alenza, 1 - 28003 MADRID • ☎ (34) 91 4421366 / 91 3367009 • 🖷 (34) 91 4419933 • 🖳 lom@lom.upm.es

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www.fidegas.com

LABORATORIO OFICIAL J. M. MADARIAGA

(1) SUPLEMENTO DE CERTIFICADO DE EXAMEN CE DE TIPO

(2) Equipos y sistemas de protección destinados a ser utilizados en atmósferas potencialmente explosivas. Directiva 94/9/CE

(3) Suplemento nº **2** del Certificado de Examen CE de Tipo **LOM 03ATEX2095 X**

(4) Equipo o sistema de protección — Sistema de medida de concentración de gases Marca FIDEGAS, sensor tipo S/3-2, centrales tipos CA-*

(5) Fabricante — Comercial de Aplicaciones Electrónicas, S.L. (CAE, S.L.)

(6) Dirección — Paseo Ubarburu, 12 20014 SAN SEBASTIÁN ESPAÑA

(7) Protocolo de ensayos nº: **LOM 10.234 QP**

(8) Variaciones incluidas en este certificado

Actualización en la evaluación a las normas EN 60079-29-1:2007 y EN 60079-0:2009

(9) Variaciones en el marcado

Sensor remoto FIDEGAS S/3-2 — ⟨Ex⟩ II 2 G Ex d IIC T6 Gb EN 60079-29-1

Centrales FIDEGAS CA-* — ⟨Ex⟩ II (2)G EN 60079-29-1

(10) Variaciones en las condiciones especiales para una utilización segura

Se mantienen las condiciones del certificado base y suplemento 1.

(11) Documentos descriptivos

	Rev.	Fecha
- Manual técnico nº S/3-2	13	2011-04
- Manual técnico nº CA-2/4/8	10	2011-04

Madrid, 2011-03-15

Carlos Fernández Ramón
DIRECTOR DEL LABORATORIO

Angel Vega Remesal
Responsable del Área ATEX

Este suplemento deberá formar parte inseparable del certificado base **LOM 03ATEX2095 X**

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RCPCER 07.4/2 Rev. 0

UNIVERSIDAD POLITÉCNICA DE MADRID
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA
(Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)

✉ Eric Kandel, 1 – 28906 GETAFE (MADRID) • ☎ (34) 91 4421366 • 📠 (34) 91 4419933 • 📧 lom@lom.upm.es

fidegas

AENOR

Certificado AENOR de Producto
AENOR Product Certificate

030/002387

AENOR certifica que | AENOR certifies that

COMERCIAL DE APLICACIONES ELECTRONICAS, S.L.

Domicilio social / Registered office	PO UBARBURU, 12 20014 SAN SEBASTIAN (Guipuzcoa - España)
suministra / supplies	Detector de gases combustibles en locales de uso doméstico / Combustible gas detector in premises for domestic use
conformes con / in compliance with	UNE-EN 50194-1:2011 (EN 50194-1:2009)
Referencias / References	Detalladas en el Anexo al Certificado Specified in Annex to the Certificate
Centro de producción / Production site	PO UBARBURU, 12 20014 SAN SEBASTIAN (
Esquema de evaluación Assessment scheme	Para conceder este Certificado, AENOR ha es comprobado el sistema de la calidad aplicad realiza estas actividades periódicamente m sido anulado, según se establece en el Regla In order to grant this Certificate, AENOR ha verified the quality system implemented fo performs these tasks periodically while the cancelled, in accordance with Specific Rules

Primera emisión / First issued	2015-05-05
Última emisión / Last issued	2025-05-05
Expiración / Validity	2026-08-15

G
Tel. 5

AENOR

Certificado AENOR de Producto
AENOR Product Certificate

030/002387

Anexo al Certificado
Annex to Certificate

Marca Comercial / Trade mark: FIDEGAS

Referencia / Reference	Gases detectados / Gases detected	Limite de detecciòn (LIE) / Detection limit	Tensión de alimentación / Supply voltage	Aparato tipo / Device type
D-194i	Gas natural y GLP	17%	230 V~	Tipo A
D-195i	Gas natural y GLP	17%	230 V~	Tipo A

Primera emisión / First issued	2015-05-05
Última emisión / Last issued	2025-05-05
Expiración / Validity	2026-08-15

AENOR CONFÍA S.A.U.
Génova, 6. 28004 Madrid. España
Tel. 91 432 60 00.- www.aenor.com

1/1

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fidegas

AENOR

Certificado AENOR de Producto
AENOR Product Certificate

N
AENOR

030/002390

AENOR certifica que | AENOR certifies that

COMERCIAL DE APLICACIONES ELECTRONICAS, S.L.

Domicilio social / Registered office	PO UBARBURU, 12 20014 SAN SEBASTIAN (Guipuzcoa - España)
suministra / supplies	Detector de monóxido de carbono (CO) en locales de uso doméstico y vehículos de recreo. / Carbon monoxide detector in premises for domestic use and recreational vehicles.
conformes con / in compliance with	UNE-EN 50291-1:2011 (EN 50291-1:2010) UNE-EN 50291-1:2011/A1:2013 (EN 50291- UNE-EN 50291-2:2011 (EN 50291-2:2010)
Referencias / References	Detalladas en el Anexo al Certificado Specified in Annex to the Certificate
Centro de producción / Production site	PO UBARBURU, 12 20014 SAN SEBASTIAN (
Esquema de evaluación Assessment scheme	Para conceder este Certificado, AENOR ha es comprobado el sistema de la calidad aplicade realiza estas actividades periódicamente mi sido anulado, según se establece en el Regla In order to grant this Certificate, AENOR has verified the quality system implemented fo performs these tasks periodically while the cancelled, in accordance with Specific Rules

Primera emisión / First issued	2015-05-05
Última emisión / Last issued	2025-05-05
Expiración / Validity	2030-05-05

Gé
Tel. 9

AENOR

Certificado AENOR de Producto
AENOR Product Certificate

030/002390

Anexo al Certificado
Annex to Certificate

Marca Comercial / Trade Mark: FIDEGAS

Referencia / Reference	Gases detectados / Gases detected	Niveles prefijados de alarma / Preset alarm levels	Tensión de alimentación / Supply voltage	Aparato tipo / Type device
D-195 CO 12V	Monóxido de carbono(CO)	50 ppm; 100 ppm; 300 ppm.	12 Vdc	Tipo A
D-195i CO	Monóxido de carbono (CO)	50 ppm; 100 ppm; 300 ppm.	230 V~	Tipo A

Primera emisión / First issued	2015-05-05
Última emisión / Last issued	2025-05-05
Expiración / Validity	2030-05-05

AENOR CONFÍA S.A.U.
Génova, 6. 28004 Madrid. España
Tel. 91 432 60 00.- www.aenor.com

1/1

fg
fidegas

www.fidegas.com

AENOR

Certificado AENOR de Producto
AENOR Product Certificate

AENOR

030/002388

AENOR certifica que | AENOR certifies that

COMERCIAL DE APLICACIONES ELECTRONICAS, S.L.

Domicilio social / Registered office	PO UBARBURU, 12 20014 SAN SEBASTIAN (Guipuzcoa - España)
suministra / supplies	**Detector de gases combustibles en vehículos recreativos y emplazamientos similares. / Combustible gas detector in recreational vehicles and similar locations.**
conformes con / in compliance with	UNE-EN 50194-1:2011 (EN 50194-1:2009) UNE-EN 50194-2:2019 (EN 50194-2:2019)
Marca Comercial / Trade Mark	FIDEGAS
Referencia / Reference	D-195i 12V
Gases detectados / Gases detected	Gasolina (hexano) y GLP / Gasoline (hexane) and LPG
Límite de detección (LIE) / Detection limit	17%
Tensión de alimentación / Supply voltage	12 Vdc
Aparato tipo / Device type	Tipo A
Centro de producción / Production site	PO UBARBURU, 12 20014 SAN SEBASTIAN (Guipuzcoa - España)
Esquema de evaluación Assessment scheme	Para conceder este Certificado, AENOR ha ensayado el producto y ha comprobado el sistema de la calidad aplicado para su elaboración. AENOR realiza estas actividades periódicamente mientras el Certificado no haya sido anulado, según se establece en el Reglamento Particular RP 030.17. In order to grant this Certificate, AENOR has tested the product and has verified the quality system implemented for its manufacture. AENOR performs these tasks periodically while the Certificate has not been cancelled, in accordance with Specific Rules RP 030.17.

Primera emisión / First issued 2015-05-05
Última emisión / Last issued 2025-05-05
Expiración / Validity 2026-08-15

Rafael GARCÍA MEIRO
CEO

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fg fidegas

www.fidegas.com

A BRAND YOU CAN TRUST

1 **SAFETY** and **RELIABILITY** for the products manufactured, to ensure the peace of mind and wellbeing of our customers, ensuring that they operate safely 24 hours a day, 365 days a year.

2 The **QUALITY** of the products manufactured and **GUIDANCE** to our customers, in order to guarantee proper, permanent levels of efficiency.

3 The entire team from our company are dedicated to providing a top-class **AFTER-SALES SERVICE.**

OUR COMMITMENT, to guarantee the safety of people and installations with gas detection equipment and systems that comply with current national legislation.

YOURS, to follow our recommendations for selection, installation and preventive maintenance, guaranteeing safe operation throughout the useful life of the equipment or system with six-monthly checks (FIDEGAS® Test Kit) or calibrations (Standard Gas) and replacement with new spare parts at the end of their useful lives.

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