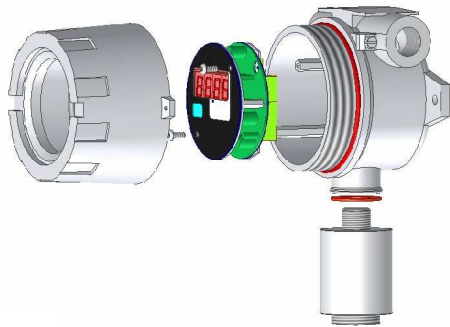


iGAS100 Universal Gas Detection System



Zone 1 Series of Gas Detectors. With a range of gas detection devices and flexible enclosure options

Explosion Proof II 2GD Ex d IIC T6 Ex tD A21 IP68 T85°C

-20°C to 40°C

IP68

Overview

The iGAS100 series of gas detectors are designed to provide an accurate, cost effective and reliable gas detection solution. The range incorporates a number of sensing technologies, each of which can be utilised in a variety of enclosure options to provide the most effective detection solution. Utilising microprocessor technology the iGAS100 gives a stable process signal output, and allows for a 4-20mA or digital addressable output signal.

The digitally addressable sensors are installed on a single cable run, which dramatically reduces installation costs. The iGAS100 series of sensors can be combined with the iGAS700 controller for remote display and calibration. The integrated processor can be used to pre-calibrate the sensor prior to installation. Alternatively calibration can be achieved on site via the Extronics control panel or locally using a handheld PC device or laptop. Out puts available include 4–20mA or Volt Free Contacts.

Features and Benefits

Rugged Enclosure

Custom enclosure providing IP67 ingress protection.

Multiple Gas Detection Options

A Range of gas detection solutions giving flexibility in sensor deployment.

Flexible Outputs

Output options allowing for integration into most control systems

System Integration

iGAS100 sensors integrate with the iGAS700 controller, or with local control panels utilising the sensors output options.

Exd Architecture

Exd connections and terminations allow for the sensors and controllers to be used without barriers.

Specification

Certification Number	EPSILON 07 ATEX 2286X
Certification Type	II 2GD Ex d IIC T6 Ex tD A21 IP68 T85°C
Dimensions	145 x 208 x mm
IP Rating	IP68
Ambient Temperature	-20°C to 40°C
Weight	Typically 1.5 kg
Operating Humidity Range	5-60% RH Electro Chem 0-95%RH Non Condensing
Operating Voltage	24VDC or Loop Powered
Repeatability	Sensor Dependant
Zero Drift	Sensor Dependant
Response Time	Sensor Dependant
Cable Entries	2 x M20 x 1.5mm
Enclosure Material	Epoxy Coated Aluminium Alloy.
Sensor Material	316 Stainless Steel

Ordering Information

iGAS100 Hazardous Area Gas Sensors

iGAS100-[#1]-[#2]-[#3]

Specify Option [#1] - Sensor Type

Toxic	T
Infrared	R
Pellistor	P

Specify Option [#2] Junction Box Type

Exd Junction Box with 4-20mA Output Only (Not Suitable for Standalone Pellistor)	JB1
Exd Junction Box with Digitally Addressable	JB2
Exd Junction Box With Display, 4-20mA Output and Local Alarm Relays	JB3
Exd Junction Box With Local Display and 4-20mA Output	JB4
Exd Junction Box With Digitally Addressable and Local Display	JB5

Specify Option [#3] Gas Detector type

Nitrogen dioxide	NO2
Sulphur dioxide	SO2
Hydrogen sulphide	H2S
Chlorine	CL2
Oxygen	O2
Nitric oxide	NO
Ammonia	NH3
Ammonia High Level	NH3HIGH
Carbon monoxide	CO
Flammability	FL
Carbon dioxide	CO2
Freon	FREON
Hydrogen cyanide	HCN

Gas types and Sensing Technologies

Type	N02	S02	H2S	CL2	O2	NO	NH3	NH3 High	CO	FL	CO2	FREON	HCN	
Toxin	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	
Infrared	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	
Pellistor	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	
FL	✗	✗	✗	✗	✗	✗	✗	✗	✗	100%	✗	✗	✗	
ppm Min	10	5	20	5	5%	10	100	250	100	x	5000	✗	5	
ppm Max	50	50	250	50	35%	250	500	5000	1000	x	5%	5000	200	

Accessories

Type 4 duct adaptor 1"bsp with calibration port
Gas Collector Cone
Weather Protector

iGAS100DA
iGAS100CC
iGAS100WP