

## Gas Detector

# RapidGas S

Product code: PW-119-X



**Innovations**



**Integrity**



**A wide range of sensor**

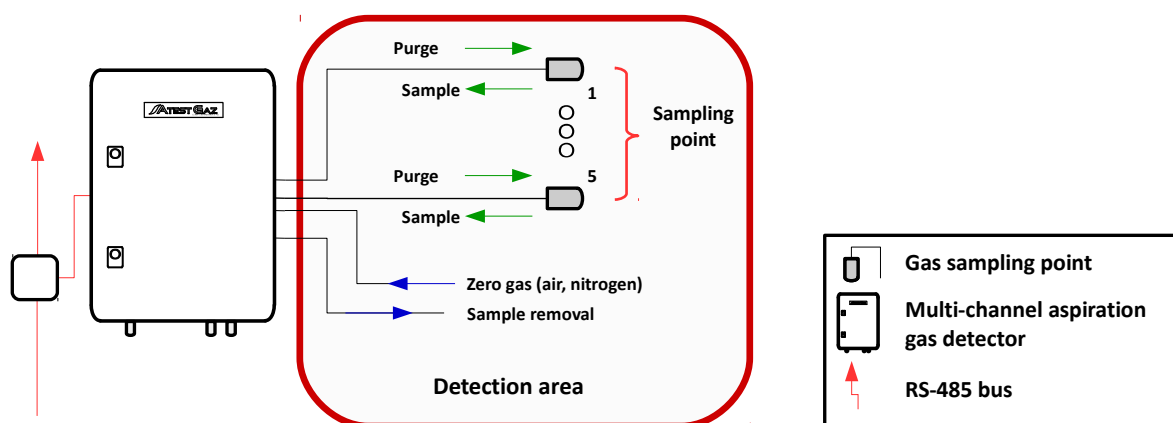


## Information about the product

The RapidGas S device is a multi-channel (1 to 5 channels) gas detector designed to measure concentration of toxic or explosive gas in surrounding atmospheres by aspirated sampling of gas mixtures at a specific number of locations. By means of sampling intakes, gas lines and a suction pump embedded inside the detector, gas samples are aspirated from the atmosphere and conveyed to gas sensors incorporated into the device interior. These sensors measure concentration of various gases and afterwards the samples are returned to the atmosphere.

The RapidGas S is a general purpose hardware platform that makes it possible to collaborate with virtually all types of gas detectors. It enables customizing of the gas detection system design according to specific arrangements of the facility and local conditions, since the set of configurable parameters include types of gases to be detected, range and accuracy of measurements, response time, ambient temperature, humidity, etc.

## Location and role of the device in Gas Safety System



## Electrical interface 24 V

24 V

-	+	A	B
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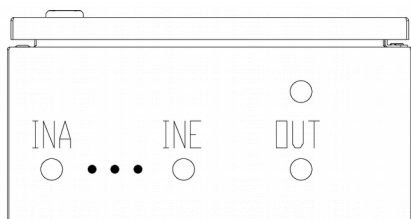
No.	Name	Pin	Description
1	Power supply		Device power supply port
		-	Negative
		+	Positive
2	Communication port		System communication port
		A	Signal line A
		B	Signal line B

230 V

A	B	E	L	N	PE
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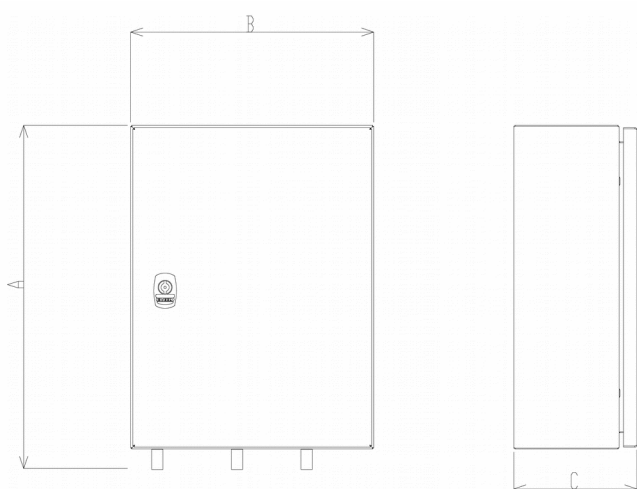
No.	Name	Pin	Description
1	Communication port		System communication port
		A	Signal line A
		B	Signal line B
		E	Shield
2	Power supply		Device power supply port
		L	Phase wire
		N	Neutral wire
		PE	Protective earth wire

## Pneumatic interface

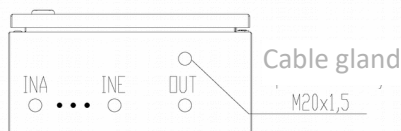


No.	Name	Description
1	INA... INE	Gas inlet of channels A...E
2	OUT	Gas outlet from channels

## Dimension



Number of channel	Dimension A	Dimension B	Dimension C
1	425	300	200
2	425	300	200
3	625	400	200
4	625	600	250
5	625	600	250

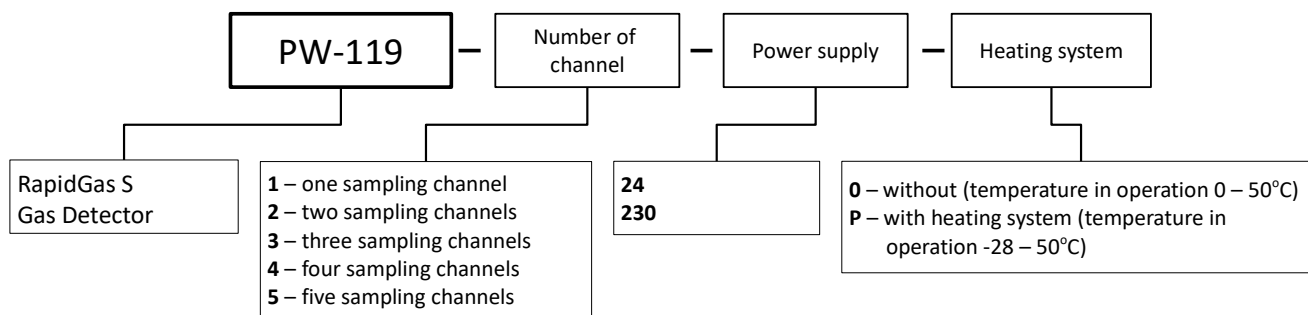


## Technical specification

Power supply	15 – 30 V $\overline{\sim}$ / 230 V $\sim$	
• Voltage Vcc	25 / 100 / 150 / 300 W	
• Power		
Environment - analyser	In operation	Storage
• Ambient temperatures	0 – 50°C / -28 – 40°C	0 – 40°C
• Humidity	0 – 99% long term 0 – 99% short term	30 – 90% long term
• Pressure	1013 $\pm$ 10% hPa	
• pH	5.5 - 7	
Sampling method	Aspiration	
Quantity of measuring channels	1 – 5	
Time parameters	T90 – depends on the type of sensor and the length and diameter of the gas path – see Calibration Certificate	
IP	IP 53	

Protection class	III
Pneumatic interface parameters	
• Type of compatible connector	BSP 60° 1/4"
Digital communication parameters	
• Port	
• Electric standard	RS-485
• Communication protocol	Sigma BUS
Cable glands	
• Cable diameter range	8 – 13 mm
• External thread	M20 x 1,5
Acceptable cable	0.5 – 2.5 mm <sup>2</sup> (solid wire) 0.5 – 1.5 mm <sup>2</sup> (multi-wire cable)
Enclosure material	SS316L
Weight	5 – 20 kg
Mandatory periodic inspection	Every 12 months (Calibration Certificate validity)

## Product marking



### Example:

PW-119-1-24-0 – RapidGas S Gas Detector, one sampling point, power supply 24 V, without heating system

## List of accessories

Product code	Description
PW-094-A	Gas sampling point
V76A	External filter
AF-HDSB-06AS	Hose HYPERLINE SB ¼", internal diameter 6.7 mm, antistatic



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