

SMART S-MS 3A

SIL2 Gas Detector with HART

- Aluminium or stainless steel enclosure
- Made for heavy industries
- Optional HART and 3-relay card
- SIL2 Hardware and SIL3 Software certified



Specification

Size	H145 x W187 x D108 mm (5.7 x 7.4 x 4.25ins)
Weight	1.5kg
Enclosure material	Die-cast aluminium with colour and chemically resistant epoxy paint
Ingress Protection	IP65
Connection	2 or 3 x 3/4" NPT
Power	12-24 Vdc
Display	None
Electrical output	Analogue 4-20 mA output; RS485 serial output; 3 relay board (optional); HART modem (optional)
Operating temperature	-40 / +65°C (catalytic sensor) -30 / +55°C (electrochemical sensor)
Humidity	20 / 90% RH @40°C (catalytic sensor) 15 / 90% RH non-condensing (electrochemical sensor)
Response time	t90 < 60 s ; t50 < 20 s
Performance	Tested in accordance with EN 60079-29-1 standard
Functional safety	SIL2 hardware and SIL3 software
Approvals	ATEX, IECEx Ex db IIC T5 Gb

Gases

Gas	Sensor type	Gas	Sensor type
Acetone (C ₃ H ₆ O)	Catalytic pellistor	ISO Butane (C ₄ H ₁₀)	Catalytic pellistor
Acetylene (C ₂ H ₂)	Catalytic pellistor	JP8	Catalytic pellistor
Ammonia (NH ₃)	Catalytic pellistor / Electrochemical	LPG	Catalytic pellistor
Butane (C ₄ H ₁₀)	Catalytic pellistor	Methane (CH ₄)	Catalytic pellistor
Carbon Monoxide (CO)	Electrochemical	Methanol (CH ₃ OH)	Catalytic pellistor
Cyclopentane (C ₅ H ₁₀)	Catalytic pellistor	Methyl Ethyl Ketone (MEK)	Catalytic pellistor
Ethane (C ₂ H ₆)	Catalytic pellistor	Nitric Oxide (NO)	Electrochemical
Ethanol (C ₂ H ₆ O)	Catalytic pellistor	Oxygen (O ₂)	Electrochemical
Ethyl Acetate (C ₄ H ₈ O ₂)	Catalytic pellistor	Pentane (C ₅ H ₁₂)	Catalytic pellistor
Ethylene (C ₂ H ₄)	Catalytic pellistor	Petrol Vapours	Catalytic pellistor
Heptane (C ₇ H ₁₆)	Catalytic pellistor	Propane (C ₃ H ₈)	Catalytic pellistor
Hexane (C ₆ H ₁₄)	Catalytic pellistor	Propyl alcohol (C ₃ H ₈ O)	Catalytic pellistor
Hydrogen Sulphide (H ₂ S)	Electrochemical	Propylene (C ₃ H ₆)	Catalytic pellistor
Hydrogen (H ₂)	Catalytic pellistor / Electrochemical	Styrene (C ₈ H ₈)	Catalytic pellistor
ISO Butane (C ₄ H ₁₀)	Catalytic pellistor	Toluene (C ₇ H ₈)	Catalytic pellistor
JP8	Catalytic pellistor	Xylene (C ₈ H ₁₀)	Catalytic pellistor