



# Hydrogen Sulphide Single Point Controller 1/2 Detector CH2S

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## Technical Data

<b>Gas</b>	Hydrogen Sulphide H2S
<b>Detection principle</b>	Electrochemical, diffusion
<b>Accuracy</b>	0,2ppm
<b>Long term output drift</b>	<2% signal loss/month
<b>Response time</b>	t90 <35 sec.
<b>Repeatability</b>	<2% of reading
<b>Storage time</b>	Max 6 months +5/+30C
<b>Mounting height</b>	<b>200 to 300mm above floor</b>
<b>Output signal</b>	(0)4-20mA, load 500ohm Selectable (0)2-10Vdc, load 50kohm Starting point 0/20% Relay 1 30Vac/dc, 0,5A, pot.free SPDT Relay 2 30Vac/dc, 0,5A pot.free SPNO/SPNC Binary 30Vdc, 0,05A open collector
<b>Input signal ext. detector</b>	4-20mA, input resistance 200ohm
<b>Voltage external detector</b>	24Vdc, max, charge 50mA
<b>Serial Interface</b>	Transciever RS485/19200 Baud/9600 at Mod
<b>Power supply</b>	18-28Vac/dc, reverse polarity prot. 90 to 250Vac 50/60Hz
<b>Power consumption</b>	100mA, max (2,5VA)
<b>Expected lifetime</b>	2 years, normal operating environ.
<b>Humidity range</b>	15-90% rH non-condensing

## Features

- Good resistance to poising
- Different housing versions
- External detector toxic gases, Ex gases, Freons temperature, pressure etc
- Up to 3 power relays, potential-free, 250Vac/dc 5A (option)
- Flashlight (option)
- Heating (option)
- Duct mounting (option)
- Uninterruptible emergency power supply (option)

## Application

Good measuring and monitoring controller based on state-of-the-art micro technology with **integrated sensor and internal buzzer** for the continuous monitoring of the ambient air and detecting hydrogen H2S concentration

The CH2S is provided with an input for **one external analog gas detector**.

4 alarm thresholds per detector are free programmable.

Configuration and operation are possible via logical, simple system menu structure without specific programming knowledge

Free programmable parameters and setpoints enable the individual adaption to a variety of possible applications of gas measuring and monitoring.

## Ordering Codes

<b>CH2S 24</b>	Single point gas controller 0-50ppm	24Vac
<b>CH2S 230</b>	Single point gas controller 0-50ppm	230Vac
<b>CH2S 24</b>	Single point gas controller 0-100ppm	24Vac
<b>CH2S 230</b>	Single point gas controller 0-100ppm	230Vac
<b>CH2S 24</b>	Single point gas controller 0-200ppm	24Vac
<b>CH2S 230</b>	Single point gas controller 0-200ppm	230Vac
<b>DUCT</b>	Duct Mounting	
<b>POW 1</b>	1 x Power relays 250Vac, 5A, potential-free, changeover	
<b>POW 2</b>	2 x Power relays 250Vac, 5A, potential-free, changeover	
<b>POW 3</b>	3 x Power relays 250Vac, 5A, potential-free, changeover	
<b>EPS</b>	Supply duration 60min., maintenance-free, changeover	
<b>CAL 2</b>	Calibration Kit for Tox-transmitters	
<b>HEAT</b>	Temp.controlled heating element 3C +/-2C0,3VA	
<b>FLASH</b>	Flashlight built-in	
<b>STAIN</b>	Enclosure of stainless steel	
<b>AIN</b>	4-20mA analogue input	
<b>GAS 17</b>	Calibration gas 17 liter	
<b>REG</b>	Pressure regulator flow adjusted to 0,5 lit/min.	
<b>Warning devices</b>	See special datasheet	
<b>Warning signs</b>	See special datasheet	

**Physical characteristics**

**Enclosure** Polycarbonate, plastic  
On request stainless steel

**Flammability** UL94 V2

**Enclosure colour** RAL light grey

**Dimensions WxHxD** 130 x 130 x 75mm

**Weight** approx 0,6kg

**Cable entry** Standard 3 x M20

**Wire connection** Screw terminal,  
min 0,25mm<sup>2</sup> and max 2,5mm<sup>2</sup>

**Wire distance** Current signal 500m  
Voltage signal 200m

**Guidelines** EMC Directive 2004/108/EEC  
Low Voltage Directive 2006/95/EC  
EN 61010-1:2010

**Operating range** -10 up to +50C

**Rating** IP65 Protection Class

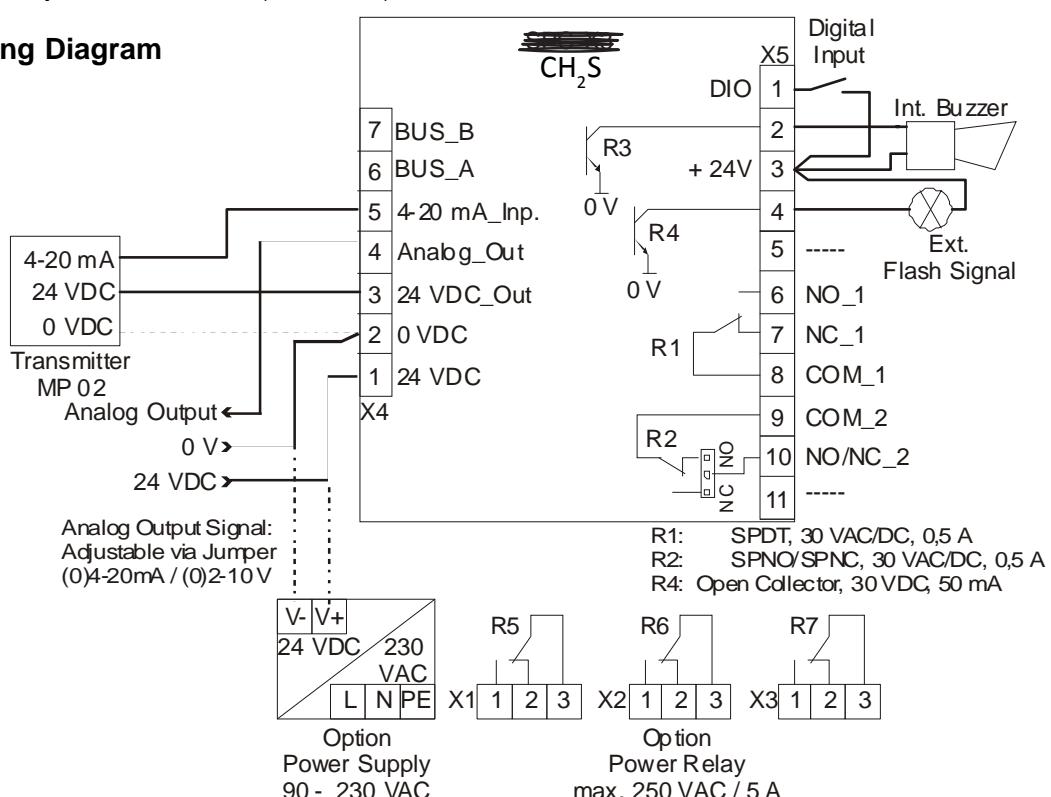
**Pressure range** Atmospheric +/-10%

**Warning buzzer**

**Acoustic pressure** 85db (distance 200mm)

**Frequency** 2300Hz

**Power consumption** 30mA, (max 0,8VA)

**Connecting Diagram****LCD display**

**LCD**

**Status LED (4)**

Two lines, each 16 characters

Normal operation - Fault - Alarm 1

- Alarm 2

**Operation****Power consumption**

4 push-buttons - menu-driven

10mA (max 0,3VA)

**Heating****Temperature controlled**

3C +/-2C

**Ambient temperature**

-30C

**Power supply**

18-28Vdc/ac

**Power consumption**

0,5A, 12VA

**Options****Power supply 230Vac**

90-250Vac 50/60Hz

**Power relays (2)**

250Vac, 5A, potential-free,  
change-over contact

**Emergency power supply**

Supply duration 60min,  
maintenance-free

**Flashlight**

IP65, LED, 3600lm