

Transmitter CS21

Monitoring toxic and combustible gases



- Selective and precise detection even in dry air and up to 96 % rel. humidity
- Wide dynamic detection range, from a few ppm up to the LEL range
- Low-cost, long-life, superior alternative for electrochemical sensors
- External sensor available

Worldwide Supplier Of Gas Detection Solutions



Transmitter CS21 for toxic and combustible gases

Averting hazards in time

The transmitter CS21 uses the proven principle of chemisorption to detect toxic and combustible gases. In less than 8 seconds the CS21 responds to gas from gas leaks. This extremely short response time allows the user to take action in time and prevent damage to people and plant.

Favourable long-term solution

Particularly long sensor life makes the CS21 a cost effective alternative for monitoring toxic and combustible gases. The sensor can be permanently operated for often 5 years or more. The CS21 is supplied pre-calibrated and easily mounts to the wall. The distance between transmitter and control module may be more than 500 meters. A robust aluminum enclosure protects the sensor and the circuitry from impacts, splash water and dust.

The transmitter must not be used directly in areas with potentially explosive atmosphere. While detecting combustible gases and vapours within LEL-range the gas being measured has to be led to the transmitter. In that case Ex-protection has to be guaranteed with external components like a flame arrestor.

Description	Gas	Detection range
Acetone	C ₃ H ₆ O	(0) 30 .. 300 ppm
Natural gas	up to 90 % CH ₄	(0) 5 .. 50 % LEL (0) 5 .. 100 % LEL
Ethanol	C ₂ H ₆ O	(0) 30 .. 2000 ppm
Carbon monoxide	CO	(0) 30 .. 300 ppm (0) 30 .. 1000 ppm
Methane	CH ₄	(0) 5 .. 50 % LEL (0) 5 .. 100 % LEL
Methanol	CH ₄ O	(0) 30 .. 1000 ppm
n-Butane	C ₄ H ₁₀	(0) 5 .. 50 % LEL (0) 5 .. 100 % LEL
n-Hexane	C ₆ H ₁₄	(0) 5 .. 50 % LEL
n-Nonane	C ₉ H ₂₀	(0) 5 .. 50 % LEL
Propane	C ₃ H ₈	(0) 5 .. 50 % LEL (0) 5 .. 100 % LEL
Toluene	C ₇ H ₈	(0) 30 .. 1000 ppm



CS21 with GMA81 A

We help to plan and execute your projects:

- Consultation for gas and water monitoring
- Best positioning of transmitters
- Various concepts for alarm triggering
- Construction and installation of complete switch cabinets
- Reliable service
- Customer specific documentation of gas warning systems

Transmitter CS21 Technical Data

Gas:

see chart

Detection range:

see chart

Gas supply:

Diffusion through stainless steel
+ PTFE membrane

Detection principle:

Chemosorption (CS)

Power supply:

10 .. 32 V DC

Output signal:

0,2 .. 1 mA (4kW) or
4 .. 20 mA (200W)

Response time:

t_{Alarm} less than 14 seconds
(depending on gas)

Expected sensor life:

> 5 years

Ambient temperatur:

-30°C .. +55°C

Humidity:

20 .. 96 % r. h.,
non-condensing

Pressure:

920 .. 1100 hPa

Casing material:

Aluminium

Casing protection:

IP54, splash water proof

Dimensions:

100 x 100 x 57 mm (WxHxD)

Weight:

370 g

Cable connection:

Shielded cable
3 x 0,75mm² for up to 500 m,
3 x 1,5 mm² for more than 500 m
PG11 - cable gland

Cable:

Shielded cable
e.g. LiYCY 3x1,5 mm²



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