



November 2022

Dear readers,

There are many gases that cannot be seen, smelled or tasted. The fact that they are so difficult to perceive makes the toxic and flammable ones among them even more dangerous. A reliable gas detection system helps protect people from the dangers gases can pose. As the challenges of

the future grow, so do the requirements for gas detection systems. Let us show you our vision of tomorrow's gas detection: the GMA400.

Hans-Jörg Hübner Hans-Jörg Hübner, CEO GfG



LEL monitoring in ATEX environments

Potentially explosive atmospheres (ATEX or Ex zones), i. e. areas containing combustible gases, can be found throughout many different industries. The danger they pose arises from an ignitable mixture of flammable gas and air on the one hand and an ignition source on the other. To keep this risk as low as possible, flammable gases and vapors are permanently monitored in Ex zones down to their lower explosion limit (% LEL). While transmitters with catalytic combustion sensors have been proven to work well for this task, there are other suitable sensor technologies that can be used as well, such as infrared and chemisorption. In any case, it is crucial that the gas detector is approved for the Ex zone you need to monitor (e.g. Ex zone 1). We offer suitable transmitters for every Ex zone and a wide range of flammable gases and vapors. Don't hesitate to contact us.

Do you need to monitor gases in Ex zones?

Click here to learn more

The future of gas detection

We developed the GMA400 to provide you with a controller that meets even the most demanding gas monitoring requirements in complex plants.

The GMA400 will let you keep an eye on the measured values of up to 128 transmitters simultaneously. Through our patented ACDC (Analog Carrier for Digital Communication) technology the controller can also communicate digitally with up to 16 analog transmitters. This will soon be expanded to 128 transmitters via the ACDC module. The advantage of the ACDC system is that it uses existing 3-wire lines (4-20 mA) for digital communication, so no rewiring is required for this additional benefit. In the future, this will also play a key role in the integration of portable gas detectors into fixed systems.

Unlimited possibilities for integration and expansion

The high-resolution display and 27 LEDs will give you clear indications about the gas concentrations of all measuring points, alarms, relay and operating states and faults. The GMA400 can be integrated into higher-level process control systems either via GMA bus or Ethernet. The latter also allows secure remote access over the Internet. Safety measures can by default be implemented via 8 internal relays, but their number can be significantly increased by adding GfG relay and display modules.



Key features at a glance:

- » Monitor 128 measuring channels
- » ACDC capable
- » Built-in Ethernet
- » Large high-resoultion color display and optional display modules
- » 8 internal relays externally expandable up to 200

Curious about this next generation controller?

Find out more



Have you seen our YouTube channel yet?

On our "GfGsafety" channel, we post informative videos showcasing our gas detection devices, their features and configurations. Check it out. The videos are available in English, French, Polish and German.

Here you'll find the YouTube channel: GfGsafety

Our tip: Subscribe now to be notified automatically when we upload new videos.

Increased sensor life due to safety function

All GfG devices with catalytic LEL sensors for combustible gases and vapors have an integrated safety function. If the measuring range is exceeded by 12 percent (112 % LEL), the sensor is de-energized for safety reasons. Mainly because there is a high risk of explosion. But also, because the measurement signal would decrease again, even with increasing gas concentration, due to the sensor lacking the oxygen required for catalytic combustion (ambiguity).

Switching off the sensor also prevents excessive wear at such high concentrations of combustible gases. You may only clear this condition by acknowledging it on your device when you are certain that there it is absolutely free of combustible gases. The device will signal that the measuring range has been exceeded significantly the entire time.

Would you like to benefit from our gas know-how?

Contact us for a free consultation

Safely monitor flammable gases

With the CC28 transmitter, you are in control of explosive gases and vapors - even in ATEX areas.

The CC28 which is equipped with a catalytic sensor has the ignition protection type ratings "db" (flameproof enclosure), "eb" (increased safety) and "mb" (encapsulation) for safe use in Ex zone 1. Additionally, its hardware also complies with the European Functional Safety Standard (up to SIL3 in redundant use).

Place the transmitter where gases are expected.

While gases heavier than air, e.g. propane, are generally found near the floor in enclosed spaces, light gases, such as methane and hydrogen, tend to accumulate at the ceiling. Our product experts are happy to help you find an ideal installation location.



Want to learn more about the CC28?

GfG Gesellschaft für Gerätebau mbH Klönnestraße 99 44143 Dortmund Germany

 Phone:
 +49 231 56400-0

 Fax:
 +49 231 56400-895

 E-mail:
 info@gfg-mbh.com





