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## What is BESafe?

BESafe is a compact, dual-channel gas detector designed for battery energy storage systems. It detects hydrogen (H<sub>2</sub>), carbon monoxide (CO), and methane (CH<sub>4</sub>), with support for two smart sensor modules—including remote placement. Hot-swappable, pre-calibrated sensors reduce downtime, while analog, relay, and RS-485 Modbus outputs enable easy integration. A built-in display, sounder, and LED alarms provide clear local alerts, all housed in an IP65-rated enclosure for use in demanding environments.

## Which gases can BESafe detect?

BESafe is currently available with sensor modules for:

- Hydrogen (H<sub>2</sub>)
- Carbon Monoxide (CO)
- Flammable gases (e.g. methane and other hydrocarbons)

Contact Crowcon to request availability of additional gas types.

## Is BESafe suitable for Ni-Cd and Lead Acid batteries?

Yes. BESafe can be configured with a **Hydrogen (H<sub>2</sub>)** sensor module to detect off-gassing from both Ni-Cd and Lead Acid batteries.

## What communication outputs are available as standard?

BESafe includes:

- Analog: 4–20mA
- Digital: RS-485 Modbus RTU
- Relays: Configurable alarm or fault outputs

## Can BESafe be used as a standalone device?

Yes. BESafe includes a local display, built-in sounder, and LED alarm indicators, allowing it to function independently without a control panel.

## Can BESafe connect to a gas control panel or BMS?

Yes. BESafe can be integrated with control systems using its 4–20mA or Modbus RTU output, making it easy to monitor multiple units across your site.

## What remote sensor cable lengths are available?

BESafe remote sensor modules can be supplied with cable lengths of 1m, 2m, 5m, 8m, 10m, or 15m. Need longer? Contact Crowcon for custom options.

## How is BESafe powered?

BESafe can be powered by 10-30V DC. Ensure power is supplied in accordance with the product manual for safe operation.

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## Where should I install the sensor modules?

Placement depends on the target gas:

- Hydrogen (H<sub>2</sub>): Mount near the ceiling, as it is lighter than air
- CO or Flammable gases: Mount at breathing zone or low level depending on the gas density

## Is wall mounting supported?

Yes. BESafe performs continuous self-checks and displays a 'Sensor Life Remaining' status, along with alerts for sensor faults and end-of-life.

## Are BESafe sensor modules hot-swappable?

Yes. Sensor modules can be removed and replaced without powering down the unit, reducing downtime during maintenance.

## Can I perform bump tests or functional tests without removing the sensor?

BESafe supports non-intrusive testing to verify sensor function without removing the sensor or interrupting operation.

## Does BESafe require tools for sensor replacement?

No tools are required. Sensors are hot-swappable and pre-calibrated for easy replacement.

## Does BESafe display sensor health or diagnostics?

Yes. BESafe runs a continuous self-check and provides a 'Sensor Life Remaining' indication and alerts for sensor faults, and end-of-life.

## What comes in the box with BESafe?

Each BESafe package includes:

- BESafe transmitter
- Sensor module(s)
- Remote sensor cable (if ordered)
- 1x M20 cable gland
- Calibration certificate(s)
- EU or Intertek Declaration of Conformity
- Quick Start Guide

## Is BESafe certified for hazardous areas?

BESafe is designed for use in safe area applications only and is not certified for hazardous area (ATEX/IECEX) zones.

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## What is the operating temperature and IP rating?

BESafe is rated for operation in:

- Temperature: -20°C to +60°C
- Humidity: 0 to 99% RH (non-condensing)
- IP Rating: IP65 (weatherproof)

## Can I request a different sensor configuration?

Please contact us with your specific application needs.

## Who do I contact for technical support or spare parts?

You can contact your local Crowcon representative or email [technicalsupport@crowcon.com](mailto:technicalsupport@crowcon.com) for assistance.