BESAFE

Dual Channel Gas Detector for Battery Energy Storage

Detecting hydrogen, carbon monoxide and methane released during thermal runaway, enabling fast, reliable safety response.



Crowcon's BESafe offers fast, accurate detection of hydrogen (H2), carbon monoxide (CO), and methane (CH4). Its dual-channel capability enables simultaneous monitoring of two gases and allows flexible configuration to suit different applications. Specifically developed for the demands of battery backup and energy storage systems, BESafe features remote smart sensors that simplify installation and reduce maintenance.

FEATURES & BENEFITS

Dual Channel Gas Detection

Supports two gas sensors, allowing flexible configurations based on application needs. Sensors can be placed remotely to monitor hard-to-reach areas or where space is constrained.

High-Performance Swappable Smart Sensors

Easily swap out pre-calibrated sensor trays without manufacturer intervention, reducing downtime and maintenance costs. Supports remote, non-intrusive testing to verify performance without interrupting operations.

Multiple Signal Output

Analog and relay outputs integrate easily with existing control systems and support multi-level audiovisual alarms. Additionally, RS485 communication with Modbus RTU enables remote monitoring and data transmission.

User-Friendly Interface

High-definition OLED display clearly shows gas readings and alarms in any lighting conditions. While simple button controls make setup and adjustments quick and intuitive.

Compact and Flexible Structural Design

Compact design fits into limited spaces such as energy storage cabinets. The IP65-rated housing ensures reliable performance in harsh environments.

On-Site, Built-In Alarm Functions

High-decibel audible alarm and bright status indicators instantly alert users to abnormal status and provide at-aglance visibility of operational state. Additionally, relay output can trigger external alarms or ventilation fans.









SPECIFICATIONS

DEVICE SPECIFICATIONS			
SIZE	175 x 150 x 55 mm		
WEIGHT	Base: 550g Adapter: 169g Sensor Tray: 65g each		
ENSLOSURE MATERIAL	Polycarbonate		
INGRESS PROTECTION	IP65		
CABLE ENTRY	M20		
POWER	10 to 30V DC, 24V DC Nominal 150mA (3.6W @ 24V dc), 5W Max		
DISPLAY	128x64 OLED		
ELECTRICAL OUTPUT	2 x 4-20mA RS-485 Modbus RTU		
RELAYS OUTPUT	SPDT Relay (1A at 24 VDC) Alarm 1, Alarm 2, Fault		
AUDIO VISUAL OUTPUT	Sounder: 85dB @ 3m LED: Power (Green), Fault (Yellow), Alarm (Red)		
OPERATING TEMPERATURE	-20 to +50°C		
OPERATING HUMIDITY	0 to 99% RH (non-condensing)		
DATA LOGGING	3000 data logs		
APPROVALS	EN 61010-1 EN 50270 UL 2075*		
WARRANTY	Contact Crowcon for Information		

^{*}Contact Crowcon for availability

GASES & RANGES				
SENSOR	GAS	RANGE	LIFE EXPECTANCY	
CATALYTIC	Hydrogen (H ₂) Methane (CH ₄)	0-100% LEL	5 years	
ELECTROCHEMICAL	Hydrogen (H ₂) Carbon Monoxide (CO)	0-500 PPM 0-1000 PPM	5-10 years	

Disclaimer

Due to ongoing research and product improvement, specifications are subject to change without notice. While every effort has been made to ensure accuracy in this document, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This document is not intended to form the basis of a contract.

For more information:

t: +44 (0)1235 557700 e: info@crowcon.com w: www.crowcon.com

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Australian Distributor

K. D. Fisher & Co. Pty Ltd ABN 27 007 879 647 Head office 18 Benjamin Street St Marys SA 5042 T +61 8 8277 3288 T 1300 533 474 E kdf@kdfisher.com.au kdfisher.com.au

