

Macurco™

BUILDING & HOME SOLUTIONS

Whether you are looking for gas detection for a security system, building automation or HVAC system, for personal safety or for monitoring specific gases in potentially hazardous environments, Macurco has a gas detector to meet your needs.



HD-6 Gas Detector

Hydrogen BESS Gas Detector

The long-life, low-maintenance Macurco HD-6 Hydrogen Gas Detector is designed for continuous hydrogen monitoring in Battery Energy Storage System (BESS) applications. In the event of battery failure, combustible gas leaks can create unstable conditions that may escalate into explosion risks. To protect personnel and assets, the HD-6 Gas Detector features two configurable alarm levels with relay activation for early warning and response. Standard features include local audible alarming, visual indicators, and analog communication for seamless integration with Building Management Systems (BMS).

Engineered for reliability and safety, the HD-6 delivers peace of mind with advanced gas detection designed specifically for modern energy storage environments. - **UL 2075 Listed**

Key Features

- UL 2075 Listed
- 10-year sensor life
- Minimal maintenance required
- 5 A SPDT fan relay, 0.5A alarm relay to control fans, valves, louvers, horn and strobes
- Sensor Range: 0-50% LEL Hydrogen
- Easy installation to 4x4 electrical boxes via mud plate
- 12 to 24 VAC or 12 to 32 VDC
- LED display to show gas concentrations easily
- 4-20mA output to control VFDs and send to BMS
- End of life notification
- Works with Macurco digital control panels

Applications

- Energy Storage Containers
- Data Center
- Charging Station
- Solar Farm
- Power Station
- Renewable Energy
- Demand Response
- Grid Services



HD-6 Front View



HD-6 Side View

BESS Gas Detector

Specifications

Size	4 1/2 x 4 x 2 1/8 in. (11.4 X 10.2 X 5.4 cm)
Shipping Weight	1 pound (0.45 kg)
Voltage/Current	Power: 3 W (max) from 12 to 24 VAC or 12 to 32 VDC
Current Draw	Current @ 24 VDC: 75 mA in alarm, 50 mA fan relay on and 23 mA stand by
Signal	Analog: 4-20mA MRS-485: Digital Modbus adapter BRS-485: BMS communication
Relays	5A Fan relay & 0.5A alarm relay User adjustable settings
Buzzer Rating	75 dBA at 10 Ft
Visual Indicator	Green status LED
Operating Temperature	-22°F to 158°F (-30°C to 70°C)
Ambient Humidity	10-90% RH non-condensing
Warranty	Two year limited warranty
Life Expectancy	10 years with EOL notification
**Certifications	Certified to UL 2075
Panel Compatibility	DVP-1200, DVP-120M, DVP-120B (Hydrogen Only)

*Please read manual for more specifications
**In Process

Accessories

Name	Model Number
Control Panels	DVP-120, DVP-120M, DVP-120B, DVP-1200
Adapter Options	MRS-485, BRS-485
Horn and Strobe (4 color options)	HS-A, HS-B, HS-R, HS-C
Duct Mount Kit	DMK-1
Weatherproof Housing Kit	WHK-1
Step-down Transformers	PS-24, PS-24-H
Calibration Kits	Based on Gas Type



Control Panels



Adapter Options



Horn and Strobe



Calibration Kits



Weatherproof Housing Kit
(Detector sold separately)

Model Number	Gas Type	Range (Units)	Low Level Alarm Adjustable (Default)	High Level Alarm Adjustable (Default)	Expected Sensor Life	Recommended Coverage Area
HD-6	Hydrogen (H ₂)	0-50% LEL	0, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 13, 14, 15, 16, 17, 18, 19, 20% LEL	0, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 13, 14, 15, 16, 17, 18, 19, 20% LEL	10 Years	Up to 1,257 sq. ft.*

