Vulcain 90DM₄

The newest refinement in infrared carbon dioxide detection
The Vulcain 90DM₄ improves upon the 90DM₃A’s reliable dual sensing technology by offering better drift and temperature compensation, in addition to a redesigned enclosure built to enhance airflow and an improved backlit display (optional).

User Friendly
- Trouble-free operation
- No moving parts
- Menu driven easy calibration

Enhanced Technology
- Improved drift and temperature compensation
- Redesigned enclosure to enhance airflow

Versatility and Reliability
- Proven infrared technology
- Specific CO₂ monitoring
- Built-in microprocessor
- 4-20 mA communication

Beneficial Options
- Optional backlit display
- Optional relay contact closure (fail safe)
- 0-5% detection range
- Modbus network output available (RS-485)

Installation, connection and use of the 90DM₄ are virtually identical to the 90DM₃A. With the same state-of-the-art microprocessor controlled CO₂ monitoring coupled with refined performance, the 90DM₄ is the top choice for monitoring CO₂ levels in schools, offices, or any other commercial application.

Mounting Made Unique and Easy
To provide maximum versatility, the 90DM₄ is available with two different housing configurations, making it ideally suited to virtually any commercial or industrial gas detection application. Both enclosures are made of ABS plastic, offering maximum durability.

Designed to accurately detect the presence of CO₂ in air-handling systems, the DT Model represents a radical innovation in housing design. Unlike other units on the market today, the enclosure is totally airtight, more compact, and extremely lightweight, with a convenient mounting bracket to improve installation. All in all, its superior operational and cost efficiency make the DT Model the only choice for larger-scale CO₂ detection applications.

The SM Model is a wall-mounted unit with a compact and an aesthetically pleasing design which blends perfectly and discretely with any room decor. Easily installed directly onto drywall or other surfaces, the SM Model ensures superior gas detection.
### General Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td><strong>Use</strong></td>
<td>Wall or duct mountable CO₂ detector for industrial or commercial use</td>
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<tr>
<td><strong>Size</strong></td>
<td>13.7 x 9.5 x 4.4 cm (5.4 x 3.75 x 1.75 in.)</td>
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<tr>
<td><strong>Weight</strong></td>
<td>SM: 200 g (8.8 oz.)</td>
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<td></td>
<td>DT: 300 g (10.56 oz.)</td>
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<tr>
<td><strong>Power Requirement</strong></td>
<td>17-27 Vac or 24-38 Vdc, 200 mA @ 24Vac</td>
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<tr>
<td><strong>Detection Range</strong></td>
<td>0-2000 ppm, 0-5%</td>
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<tr>
<td><strong>Accuracy</strong></td>
<td>+/- 100 ppm + 3% of reading</td>
</tr>
<tr>
<td><strong>Response Time</strong></td>
<td>&lt; 60 sec. (for 90% of the reading)</td>
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<tr>
<td><strong>Sensor Life Expectancy</strong></td>
<td>&gt; 10 years</td>
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<tr>
<td><strong>Relay Output Rating</strong></td>
<td>5A, 30 Vdc or 250 Vac (resistive load)</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>LCD (optional)</td>
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<tr>
<td><strong>Optional Outputs</strong></td>
<td>4-20 mA (current sourcing only)</td>
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<tr>
<td></td>
<td>1 SPDT Relay</td>
</tr>
<tr>
<td><strong>Operating Humidity Range</strong></td>
<td>0-95% RH, Non-condensing</td>
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<tr>
<td><strong>Operating Temperature Range</strong></td>
<td>0 °C to 40 °C (32 °F to 100 °F)</td>
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<tr>
<td><strong>Warranty</strong></td>
<td>5 Years (limited)</td>
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### Ratings and Certifications

- **Certified to**: CAN/CSA C22.2 No. 61010-1
- **Conforms to**: ANSI/UL 61010-1
As world leaders in gas detection solutions, Honeywell Analytics’ Vulcain range of gas detection systems has been designed to provide efficient, practical and cost-effective equipment to protect people from a variety of forms of hazardous gases and to efficiently monitor and control indoor air quality. The equipment is also extremely simple to install and easy to operate and maintain.

**The Vulcain range of fixed gas detection and air monitors**

Vulcain Sensors
From refrigerants to toxic and combustible gases, Honeywell Analytic’s Vulcain line has a sensor designed for any industrial or commercial application. With award winning sensor technology, this line of sensors is the answer to any fixed HVAC, IAQ or gas detection concerns.

Vulcain Controllers
Designed for industrial or commercial use, the Vulcain 301C monitors and controls toxic gases, combustible gases and oxygen hazards. With the same simple installation and operation and flexibility as the Vulcain 301C, the Vulcain 301EM is specifically designed to fulfil the requirements of a mechanical room.

Find out more
For more information on Honeywell Analytic’s Vulcain line of products, visit www.honeywellanalytics.com or contact us at 800 563 2967

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Stand-Alone Dual Gas Monitor
For applications where gas detection is only needed at one or two points, the Vulcain 301M offers a simple solution. While continually monitoring for CO, a remote sensor can also be integrated to detect CO, NO2, propane, hydrogen or methane with a remote sensor that can be placed up to 200’ away.

Commercial CO2 Detection
Using proven infrared dual sensing technology to detect carbon dioxide (CO2) the Vulcain 90DM4 can be either wall or duct mounted to monitor CO2 levels in your commercial environment.