

## Ventilation on Demand



## Gas Monitoring Devices



Discover the advantages  
[www.belimo.com](http://www.belimo.com)

**BELIMO®**

# Innovation for peace of mind



HVAC system operation is critical for maintaining adequate safe indoor air quality (IAQ). Belimo gas monitoring systems provide accurate measurement, superior reliability, and easy installation. They can work as a standalone system or seamlessly integrate into major Building Management Systems (BMS). An intelligent peer-to-peer communication protocol allows users to configure and install a complete ventilation control system with only one monitor, or dozens, operating in multiple ventilation zones. The result is the assurance of occupant safety and comfort in buildings.



# Superior performance

Belimo's gas monitors provide air quality monitoring for commercial properties. Closely monitoring airborne pollutants to control fresh air ventilation improves the health and wellbeing of occupants, while minimizing excess ventilation, resulting in reduced energy and maintenance costs. Belimo gas monitors are factory calibrated and can monitor up to two gases simultaneously. All monitors feature audible and visual alarms and CAN bus communication, allowing for standalone operation and networking of up to 32 devices. Select models feature relays and analog outputs to control ventilation directly, as well as BACnet MS/TP, allowing for integration into a BMS. The monitors can be easily assigned to groups on site for ventilation zoning on the same network, significantly reducing control wiring and installation time. Gas monitors are wired via a daisy chain and are required to be calibrated annually. All gas monitoring products are backed by a five-year warranty, with the exception of sensor modules, which are backed by a one-year warranty.



## Seamless Integration

Enhanced communication and integration with major building management systems via BACnet MS/TP with select models.



## Modular Design

The compact modular design allows for easy installation and commissioning to ensure optimal system performance.



## Reliable and Dependable

Factory calibrated and designed from the highest quality materials delivering accurate and dependable readings.

"Belimo's gas monitors with dual sensors are great for enclosed parking garage applications requiring both CO and NO<sub>2</sub> gas monitoring and alarm. The ability to control the ventilation system from any one monitor makes installation easier and lowers total installed cost."

**Robert Eddy, President**  
**EP Sales, Inc., Bloomington, MN**

# Intuitive design

**Backlit Display**

**NEMA2, IP 44  
Rated Enclosure**

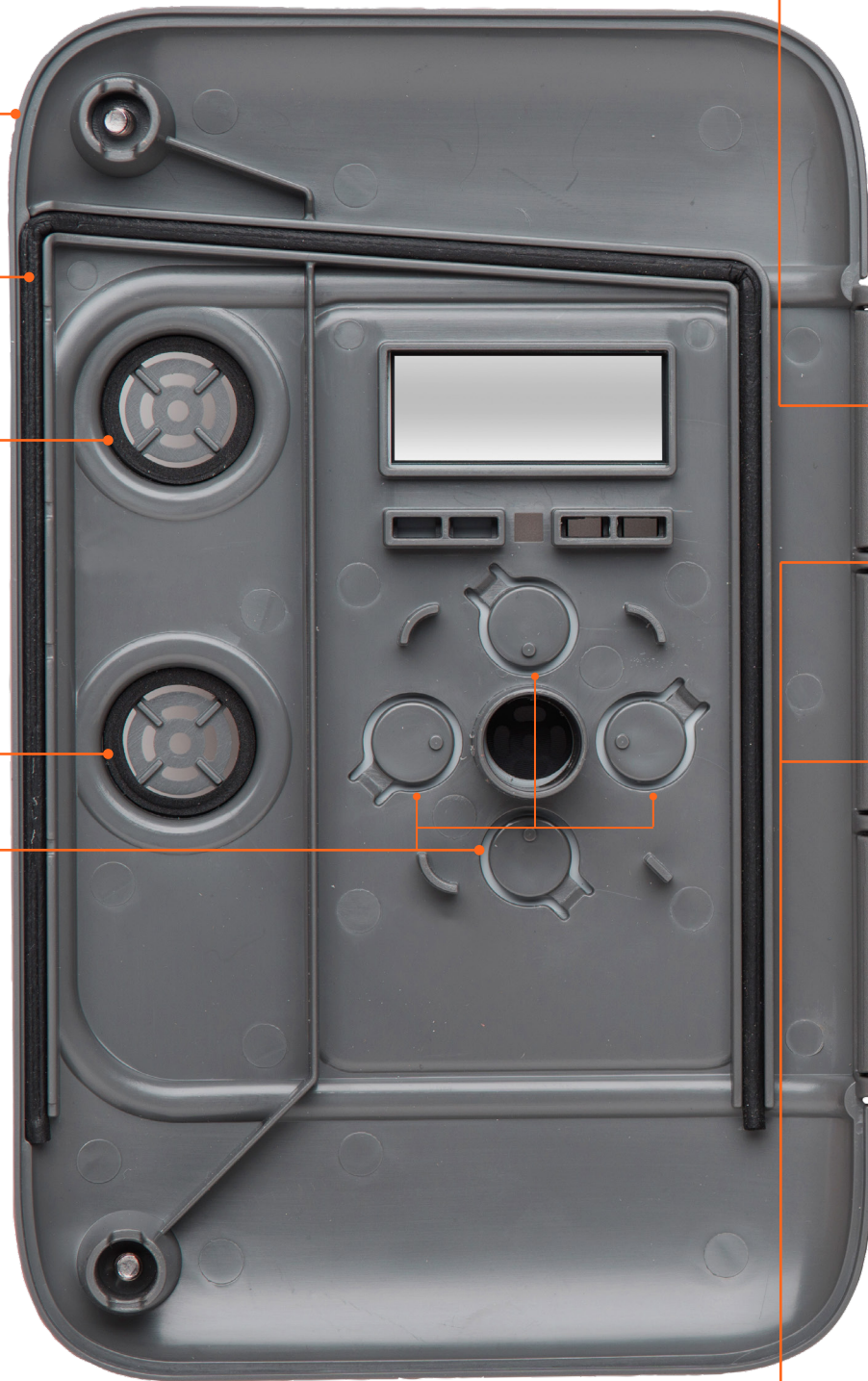
**Inner Drip  
Seal**

protects the  
electronics from  
condensation  
buildup

**Programmable  
Interface**

allows for easy access  
and configuration of 77  
programmable settings

All vehicle emissions gas  
monitors (CO, NO<sub>2</sub>, CO + NO<sub>2</sub>)  
are certified under the gas and  
vapor detectors and sensors  
standards to UL.



**Audible and Visual Alarms**

allow for on-demand ventilation  
and relay activation



5-year warranty





Peer to peer communication allows daisy-chain installation of up to 32 devices, reducing cabling.

### 3 Conduit Knockouts

**Factory Calibrated Hot Swappable Sensor Modules** can monitor up to two gases using one device.

### CAN bus Network Gateway

allowing for standalone operation

**BACnet MS/TP Network Gateway** for integration into a BMS

### SPDT Relays

to directly control ventilation

### 3 models available:

- A = CAN bus, BACnet MS/TP, 1 Relay, 2 Analog Outputs
- B = CAN bus, BACnet MS/TP, 2 Relays\*
- C = CAN bus


\*Model -B shown in image

**Water and Condensation Outlet**


**2 Conduit Knockouts**

# Product range


## Vehicle Emissions

Application	Model #	Old Model #	Output signal				Measuring range			Communication	
			Active	1 SPDT relay	2 SPDT relays	2 analog 4...20 mA or 2...10 V	Carbon Monoxide	Nitrogen Dioxide	Measuring range	CAN bus	BACnet MS/TP
 Vehicle Emissions	22G02-5A	EXT-OP-6002-250-A	■	■		■	■		0...250 ppm	■	■
	22G02-5B	EXT-OP-6002-250-B	■		■		■			■	■
	22G02-5C	EXT-OP-6002-250-C	■				■			■	
	22G14-5A	EXT-OP-6014-A	■	■		■		■	0...10 ppm	■	■
	22G14-5B	EXT-OP-6014-B	■		■			■		■	■
	22G14-5C	EXT-OP-6014-C	■					■		■	
	22G0214-5A	EXT-6002-250-14-A	■	■		■	■	■	0...250 ppm CO, 0...10 ppm NO <sub>2</sub>	■	■
	22G0214-5B	EXT-6002-250-14-B	■		■		■	■		■	■
	22G0214-5C	EXT-6002-250-14-C	■				■	■		■	




## Indoor Air Quality

Application		Model #	Old Model #	Output signal				Measuring range		Communication	
				Active	1 SPDT relay	2 SPDT relays	2 analog 4...20 mA or 2...10 V	Carbon Dioxide	Measuring range	CAN bus	BACnet MS/TP
 Indoor Air Quality	22G15-5A3	EXT-OP-6015-2000-A	■	■		■	■	0...2000 ppm	■	■	
	22G15-5B3	EXT-OP-6015-2000-B	■		■		■		■	■	
	22G15-5A5	EXT-OP-6015-5000-A	■	■		■	■	0...5000 ppm	■	■	
	22G15-5B5	EXT-OP-6015-5000-B	■		■		■		■	■	
	22G15-5B6	EXT-OP-6015-10000B	■		■		■	0...10000 ppm	■	■	
	22G15-5C6	EXT-OP-6015-10000C	■				■		■		

## Combustible and Toxic Gas Monitoring (Currently only available in Canada)

Application	Model #	Old Model #	Output signal				Measuring range								Communication		
			Active	1 SPDT relay	2 SPDT relays	2 analog 4...20 mA or 2...10 V	Ammonia	Methane	Propane	Hydrogen	Hydrogen Sulfide	Chlorine	Oxygen Leak	Oxygen Depletion	Measuring range	CAN bus	BACnet MS/TP
 Combustible and Toxic Gas	22G04-5A	EXT-OP-6004-A	■	■		■	■								0...250 ppm	■	■
	22G04-5B	EXT-OP-6004-B	■		■		■									■	■
	22G05-5A	EXT-OP-6005-A	■	■		■		■							0...50% LEL	■	■
	22G05-5B	EXT-OP-6005-B	■		■			■								■	■
	22G05-5C	EXT-OP-6005-C	■					■								■	
	22G06-5A	EXT-OP-6006-A	■	■		■			■							■	■
	22G06-5B	EXT-OP-6006-B	■		■				■							■	■
	22G06-5C	EXT-OP-6006-C	■						■							■	
	22G08-5A	EXT-OP-6008-A	■	■		■				■						■	■
	22G08-5B	EXT-OP-6008-B	■		■					■						■	■
	22G08-5C	EXT-OP-6008-C	■							■						■	
	22G16-5A	EXT-OP-6016-A	■	■		■					■				0...50 ppm	■	■
	22G16-5B	EXT-OP-6016-B	■		■						■					■	■
	22G17-5A	EXT-OP-6017-A	■	■		■						■			0...10 ppm	■	■
	22G17-5B	EXT-OP-6017-B	■		■								■			■	■
	22G22-5A	EXT-OP-6022-A	■	■		■								■	0...50% O <sub>2</sub>	■	■
	22G22-5B	EXT-OP-6022-B	■		■									■		■	■
	22G23-5A	EXT-OP-6023-A	■	■		■								■		■	■
	22G23-5B	EXT-OP-6023-B	■		■									■		■	■

## Accessories

Application	Model #	Old Model #	Output signal					Communication	
			Active	1 SPDT relay	2 SPDT relays	4 SPDT relays	2 analog 4...20 mA or 2...10 V	CAN bus	BACnet MS/TP
 Communication Modules	C-22G-5A	EXT-OP-6000-A	■	■			■	■	
	C-22G-5B	EXT-OP-6000-B	■		■			■	■
	C-22G-5C	EXT-OP-6000-C	■					■	
 Relay Unit	C-22G-50	EXT-OP-6100	■			■		■	
 High-Low Kit	A-22G-A14	EXT-OP-6000-HL							

For all gas monitoring accessories, please see the Product Guide and Price List on the Belimo website.