

Gas Monitor

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. All gas monitors are wired via a daisy chain and are backed by a five-year warranty.











Gas Monitor





Type Overview

Туре	Measured values	Number of relays	Output signal active gas	Communication
22G0214-5A	CO, NO ₂	1	2x AO	CAN bus, BACnet MS/TP
22G0214-5B	CO, NO₂	2	-	CAN bus, BACnet MS/TP
22G0214-5C	CO, NO ₂	0	-	CAN bus



Technical data

Electrical Data	Nominal voltage	AC/DC 24 V	
	Nominal voltage frequency	50/60 Hz	
	Power consumption AC	5 VA	
	Power consumption DC	1.7 W	
	Cable entry	2 top, 2 bottom, 1 rear – 1/2" EMT	
	Cable specification	Power cable: 1820 AWG Communication cable: 24 AWG twisted shielded	
		pair, low capacitance	
	Fuse	Thermal PTC, auto-reset	
Data bus communication	Communication	CAN bus	
Data Das communication		BACnet MS/TP	
Functional Data	Sensor Technology	Electro-chemical	
	Application	air	
	Output signal active note	Analog outputs (2), 210 V or 420 mA, user selectable with jumper	
	Output signal relay note	Relays (1 or 2) SPDT, 5A @ AC 125 V, non-inductive	
	Mounting	Install between 3 ft [1 m] from the floor to half of the ceiling height	
	Max. altitude	6562 ft [2000 m] above sea level	
	Max. altitude note	Calibration verification is recommended above	
		610 m [2000 ft]	
	Coverage area	Radius: 15 m [50 ft]	
		Area: 700 m ² [7500 ft ²] There can be no obstructions such as walls,	
		stairs, elevators, shelving with solid fill, tool	
		chests, etc.	
	Display	LCD With backlight	
	·	Gas type, gas concentration, alarm level status	
	Response time	<30 s (T90)	
	Alarm	Audible alarm Built-in white strobe for level 3	
Measuring Data	Measured values	СО	
		NO ₂	
	Measuring range gas	CO: 0250 ppm	
	Calibratian	NO ₂ : 010 ppm	
	Calibration	Sensor modules are recommended to be calibrated annually.	
	Long-term stability	<5% per year	
		<2% per month	
	Measurement Repeatability	<+3% CO equivalent <+2% NO₂ equivalent	
Materials	Housing	UL94 5VA	
Safety Data	UL Approval	cULus according to UL2075, ULC-S588 cCSAus listed to C22.2 No. 61010-1-12, UL Std. No. 61010-1 (3rd Edition), harmonized under IEC/EN 61010-1 BTL listed No. BTL-30001	
	Pollution degree	2	
	Ambient humidity	1590% RH continuous, 099% RH	
	Anahiant tanan ayat:	intermittent, non-condensing	
	Ambient temperature	-2040°C [-4104°F]	

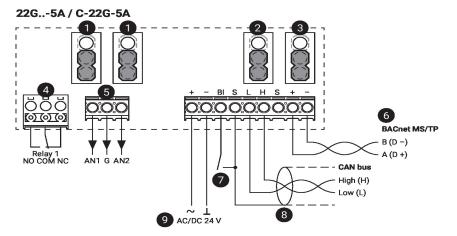


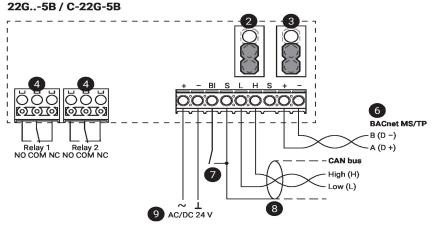
Accessories

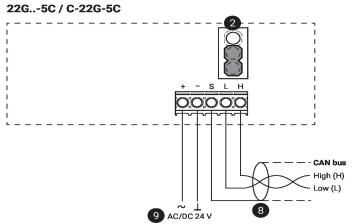
Spare parts	Description	Туре
	Sensor module CO (Carbon Monoxide), 0250 ppm, Electro-chemical	R-G02
	Sensor module NO₂ (Nitrogen Dioxide), 010 ppm, Electro-chemical	R-G14
Communication module	Description	Туре
	Communication module, CAN bus, BACnet MS/TP, 1 SPDT Relay, 2 Analog Outputs	C-22G-5A
	Communication module, CAN bus, BACnet MS/TP, 2 SPDT Relays	C-22G-5B
	Communication module, CAN bus	C-22G-5C
Electrical accessories	Description	Туре
	Audible alarm	A-22G-A16
	High-low mounting kit	A-22G-A14
Mechanical accessories	Description	Туре
	Splash proof enclosure, Wall mount	A-22G-A12
	Duct mount enclosure, Duct mount	A-22G-A13



Wiring Diagram



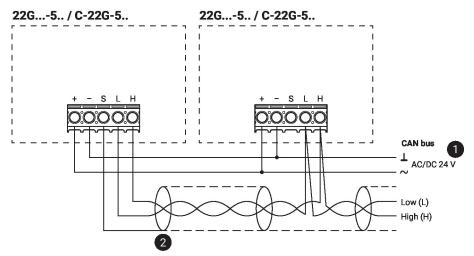




- Analog outputs
 Down position: 2...10 V (factory setting)
 Up position: 4...20 mA
- 2 End of line (EOL) jumper: CAN bus
 Down position: Termination OFF (factory setting)
 Up position: Termination ON (first and last unit only should have this jumper in the up position)
- BEND of line (EOL) jumper: BACnet MS/TP
 Down position: Termination OFF (factory setting)
 Termination ON (first and last unit only should have this jumper in the up position)
- 4 Relay output
- 5 Analog output
- 6 Shield connected at the first unit only, at others only looped through
- Binary input to limit switch
- 8 Shield connected at the first unit only, at others only looped through
- 9 No connection to the ground



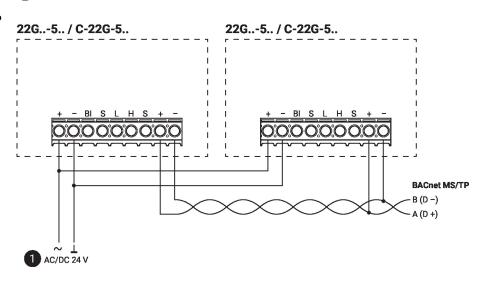
Wiring CAN bus CA



1 No connection to the ground

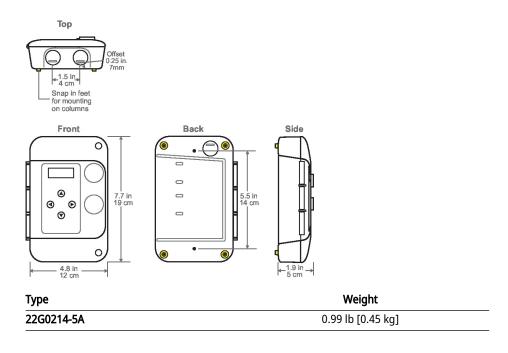
2 Shield connected at the first unit only, at others only looped through

Wiring RS485 BACnet MS/TP



No connection to the ground

Dimensions





Technical data sheet	22G0214-5
Туре	Weight
22G0214-5B	0.99 lb [0.45 kg]
22G0214-5C	0.99 lb [0.45 kg]

Further documentation

- Installation instructions
- Operating instructions