

Should a client wish to switch from one gas to another, all that is needed is to purchase a sensor/board and install it. The user can select multiple screens from the menu that display relay status, time, TWA, STEL, concentration, and other data. Programming and calibration is non-proprietary and is accessed through a user-selectable password that protects system integrity. The units can be installed as stand-alone, or networked digitally with a BACnet-enabled controller. The B5 supports BACnet MS/TP protocol and can be networked to form a BACnet MS/TP network. The B5 can be set to be a Master Node or a Slave Node in the field. Default is Slave Node. All relay parameters can be controlled and programmed through a BACnet controller or set individually on the unit.

B5	-						-						-		-	X
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Span Ordering Code
(See Below for Code)

Enclosure, Standard.....	O
Enclosure w/Pump-thru Cap Kit	P
Enclosure w/Splash Guard Kit	S
Enclosure w/Duct-Mount Kit	D
Factory Provided	X

Gas Type, Technology, Span Range	Gas Ordering Code	Span Ordering Code
Acetone, Catalytic Bead, 0-100%LEL	CH3CO	100L
Ammonia, Electrochemical, 0-100PPM	NH3	100P
Ammonia, Electrochemical, 0-1000PPM	NH3	1000P
Arsine, Electrochemical, 0-1PPM	ASH3	1P
Benzene, Catalytic Bead, 0-100%LEL	C6H6	100L
Iso-Butane, Catalytic Bead, 0-100%LEL	C4H10	100L
Butanol, n-Butane, Catalytic Bead, 0-100%LEL	BUTAN	100L
Carbon Dioxide, Infrared, 0-5000PPM	CO2	5000P
Carbon Dioxide, Infrared, 0-5%VOL	CO2	5V
Carbon Dioxide, Infrared, 0-20%VOL	CO2	20V
Carbon Dioxide, Infrared, 0-100%VOL	CO2	100V
Carbon Monoxide, Electrochemical, 0-250PPM	CO	250P
Carbon Monoxide, Electrochemical, 0-1000PPM	CO	1000P
Chlorine, Electrochemical, 0-5PPM	Cl2	5P
Chlorine Dioxide, Electrochemical, 0-2PPM	ClO2	2P
Combustibles, Catalytic Bead, 0-100%LEL	GENL	100L
Diborane, Electrochemical, 0-2 PPM	B2H6	2P
Ethylene Catalytic Bead, 0-100%LEL	C2H4	100L
Ethylene Oxide, Electrochemical, 0-20PPM	ETO	20P
Germane, Electrochemical, 0-2PPM	GeH4	2P
Hydrogen, Electrochemical, 0-1000PPM	H2	1000P
Hydrogen, Electrochemical, 0-2000PPM	H2	2000P
Hydrogen, Catalytic Bead, 0-100%LEL	H2	100L
Hydrogen Bromide, Electrochemical, 0-30PPM	HBR	30P
Hydrogen Chloride, Electrochemical, 0-30PPM	HCl	30P
Hydrogen Cyanide, 0-50PPM	HCN	50P
Hydrogen Sulphide, Electrochemical, 0-25PPM	H2S	25P
Hydrogen Sulphide, Electrochemical, 0-100PPM	H2S	100P
Methane, Catalytic Bead, 0-100%LEL	CH4	100L
Methanol, Catalytic Bead, 0-100%LEL	CH3OH	100L
Nitric Oxide, Electrochemical, 0-100PPM	NO	100P
Nitrogen Dioxide, Electrochemical, 0-10PPM	NO2	10P
Oxygen, Electrochemical, 0-25% VOL	O2	25V
Ozone, Electrochemical, 0-1PPM	O3	1P
Iso-Pentane, Catalytic Bead, 0-100%LEL	C5H12	100L
Phosphine, Electrochemical, 0-1PPM	PH3	1P
Phosphine, Electrochemical, 0-5PPM	PH3	5P
Propane Catalytic Bead, 0-100%LEL	C3H8	100L
Silane, Electrochemical, 0-50PPM	SiH4	50P
Sulphur Dioxide, Electrochemical, 0-6PPM	SO2	6P

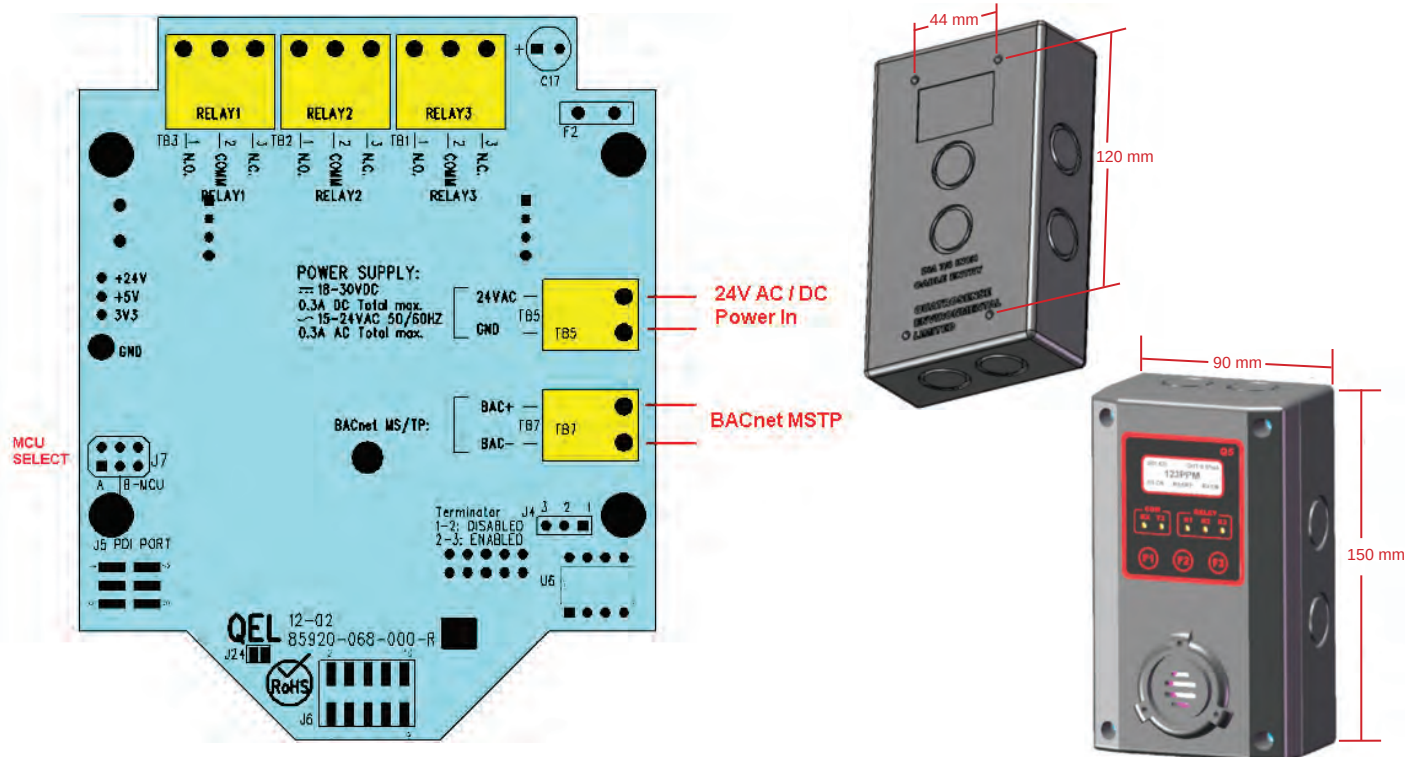
- ▶ Uses Electrochemical, Catalytic Bead or Infrared Sensors
- ▶ Pre-calibrated sensors available for easy replacement without calibration
- ▶ Three on-board user-programmable relays
- ▶ Non-proprietary set-up and calibration procedures
- ▶ Removable terminal blocks for easy wiring
- ▶ Digital display of TWA, STEL, concentration and relay status
- ▶ Stand-alone operation
- ▶ BACnet MS/TP digital communication protocol
- ▶ Integral buzzer with three tones
- ▶ NEMA 4X enclosure with knock-outs
- ▶ Sensor housing sealed from electronics
- ▶ Duct mount available
- ▶ Splash guard available
- ▶ Flow through/calibration cap available
- ▶ Operates on 24 VAC/VDC



QUATROSENSE
ENVIRONMENTAL
LIMITED

Tel: 613-838-4005
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QEL B5 Series Toxic/Combustible Smart Gas Transmitters



ELECTRICAL AND MECHANICAL SPECIFICATIONS

Input Power:

24 VDC Nominal, range 18-30 VDC, 0.3 A DC Total Max
24 VAC Nominal, range 15-24 VAC, 0.3 A AC Total Max
AC Must **Not** be grounded

Fuse:

F2 on Main Board: Polyswitch 750 mA
Polyswitch resets after Fault 15 cleared and powered up

Sensor:

Combustible Gases: Catalytic Bead
Toxic Gases: Electrochemical, Infrared

Sampling: Diffusion or Pump-through

Panel Indicators:

- 5 Status LED's
 - ▶ RS-485 TX Status (Green)
 - ▶ RS-485 RX Status (Green)
 - ▶ Relay 1 Status (Red)
 - ▶ Relay 2 Status (Red)
 - ▶ Relay 2 Status (Red)

Display:

LCD graphic display c/w backlight

Keypad:

3 Capacitive touch sensing keys: F1, F2, F3

Relays:

- 3 Relays SPDT, dry contacts
 - ▶ 1.0 A maximum at 30 VDC (resistive load)
 - ▶ 0.3 A maximum at 125 VAC (resistive load)

Buzzer: 80 db at 10 cm, 2700 Hz
Buzzer with 3 programmable tones

Output signal:

BACnet MS/TP
Default is Slave
Default Baud rate 38400 bps

Enclosure Rating:

IP 66 & NEMA 4, 4X, 12 & 13

Operating Temperature:

-40° C to 70° C, depends on sensor specification

Ambient Humidity:

5% to 95% RH (non-condensing)

Storage Temperature:

0° C to 40° C, depends on sensor specification

Size: 150 mm x 90 mm x 65 mm

Weight: Less than 0.5 lbs

Ensure a complete understanding of all applicable Federal, State, Provincial and Local Health and Safety laws and regulations before using these products.



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This brochure includes general specifications which are subject to change without notice.