

8 CHANNEL WALL MOUNT CONTROLLER

Gas Detection for Life

Beacon 800 Model



Features

- Low cost versatile solution
- Capable of up to 8 separate channels
- Digital display of all 8 channels simultaneously
- Compact, weatherproof, NEMA 4X enclosure
- 240 VAC or 24 VDC operation
- Long life sensors (2+ years typical)
- Accepts any 4-20 mA transmitter
- Audible alarm with reset button
- Two programmable alarm levels per channel
- Common alarm and fail relays
- Relay rating 10 amps, form C
- View min/max reading
- Adjustable timer delay on/off

Applications

- Petrochemical plants
- Refineries
- Water & wastewater treatment plants
- Pulp & paper mills
- Gas, telephone & electric utilities
- Parking garages
- Manufacturing facilities
- Steel
- Automotive
- HVAC

Gas Detection should not be complicated. The Beacon 800 is gas detection simplified.

The Beacon 800 is a simplified, versatile, low cost fixed system controller for one to eight points of gas detection. It is microprocessor controlled and is capable of accepting up to 8 separate 4-20 mA sensor transmitters which can be either 2 or 3 wire. The Beacon 800 can be powered by either 24 VDC or 240 VAC. It is simple to operate and comes complete with a wall mount installation kit.

The 2 large digital displays have backlighting and easily identify both the gas type and the gas concentration for all 8 channels simultaneously. The Beacon 800 is also housed in a NEMA 4X rated case for a weather tight seal. This case design complies with the new lock out/tag out standard and can be fully secured. An external reset switch allows alarms to be silenced from outside the controller housing. The bottom mounted wiring hubs allow for easy wiring.

With 10 amp rated relays, the Beacon 800 can be wired directly to a variety of devices like alarm horns, buzzers or lights. This eliminates the need for costly external relays from the controller to devices.

RKI offers the industry's widest selection of standard and toxic gas detection sensors which can be utilised with the Beacon 800, providing gas monitoring protection for almost any application.



RIKEN KEIKI

Beacon 800 Model

Physical	
Dimensions:	Height 318mm Width 279 mm Depth: 163 mm
Enclosure:	Wall mounting grey polycarbonate with hinged cover.
Conduit Connection:	3/4" NPT conduit hubs, 4 provided for sensors, power and relay wiring.
Wiring Termination:	Screw type terminal block 14 gauge max.
Environmental	
Operating Temp:	-20°C to 50°C
Storage Temp:	-20°C to 70°C
Relative Humidity:	0 – 100% RH
Enclosure Rating:	NEMA-4X enclosure, waterproof, chemical and weather resistant.
Inputs	
4-20 mA	Accepts any 4-20 mA transmitters (24 VDC, 2 or 3 wire). Wiring distances up to 1,500 metres.
Sampling methods:	Diffusion and sample draw heads available. Carbon Monoxide (CO) 0 - 300 ppm, Combustibles 0 -100% LEL, Nitrogen Dioxide (NO2) 0 - 15.0 ppm (Refer to list of detectable Gases for additional ranges).
Outputs	
Relays:	2 relays per channel 10 amp rating, SPDT isolated contacts. <i>1 set of common relays: 2 for gas alarm levels, 1 for malfunction. Relays fully programmable for:</i> increasing or decreasing alarms, latching or self reset, normally energized or normally de-energized, time delay for alarm on and alarm off.
24 VDC:	24 VDC output provided to operate sample draw adapters or other accessories
Display:	2 alphanumeric displays with backlighting. 16 characters per line; 4 lines each. All 8 channels continuously displayed.
Audible:	Built-in audible alarm, 94 dB, mounted on enclosure. Coded output: Pulsing = gas alarm, Steady = fail
Visual:	4 visual LED alarms on front cover for alarm indications, pilot and malfunction.
Optional Expansion Cards:	Individual 4-20 mA (or 1-5 VDC) outputs. Heavy duty relay card (4 each @ 30 amps).
Power:	240 VAC or 24 VDC. Optional – 115 VAC. Battery backup option available.
Warranty:	Two years materials and workmanship.

Partial List of Detectable Gases

Many other gases or ranges available. Contact Control Equipment for gases or ranges not listed

Ammonia (NH3)	0 – 75.0 ppm	Combustibles	0 – 100% LEL	Nitrogen Dioxide (NO2)	0 – 15.0 ppm
Arsine (AsH3)	0 – 0.2 ppm	Diborane (B2H6)	0 – 30.0 ppm	Nitrogen Trifluoride (NF3)	0 – 30.0 ppm
Boron Trichloride (BCl3)	0 – 15.0 ppm	Fluorine (F2)	0 – 5/15 ppm	Oxygen (O2)	0 – 25.0%
Carbon Dioxide (CO2)	0 – 1.0 %	Hydrogen (H2)	0 – 2000 ppm	Ozone (O3)	0 – 1.0 ppm
Carbon Monoxide (CO)	0 – 300 ppm	Hydrogen Chloride (HCl)	0 – 15.0 ppm	Phosphine (PH3)	0 – 1.0 ppm
Chlorine (Cl2)	0 – 3.0 ppm	Hydrogen Fluoride (HF)	0 – 9.0 ppm	Silane (SiH4)	0 – 15.0 ppm
Chlorine Dioxide (ClO2)	0 – 1.0 ppm	Hydrogen Sulfide (H2S)	0 – 100.0 ppm	Sulphur Dioxide (SO2)	0 – 30.0 ppm
Chlorine Trifluoride (ClF3)	0 – 1.0 ppm	Nitric Oxide (NO)	0 – 100.0 ppm	TEOS (Si(OC2H5)4)	0 – 15/30 ppm

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