Technical Data Sheet

Beacon 800 Eight Channel Wall Mount Controller by RKI Instruments

Brand / manufacturer	RKI Instruments
Product codes	SKU: 72-2108RK

Product description

RKI Instruments Beacon® 800 eight-channel wall-mount controller (72-2108RK): versatile, low-cost fixed system controller for one to eight points of gas detection.

Key benefits

- Accepts up to 8 separate 4-20 mA sensor transmitters (2 or 3 wire)
- Two large backlit digital displays show gas type and concentration for all 8 channels simultaneously
- Two programmable alarm levels per channel; audible alarm with reset button; common alarm and fail relays
- 3 A form C relays wire directly to horns, buzzers or lights, no external relays needed
- 85–264 VAC or 24 VDC operation; long-life sensors (2+ years typical)
- Compact, weatherproof NEMA 4X enclosure; complies with lock-out/tag-out standards; external reset switch
- Bottom-mounted wiring hubs; complete with wall mount installation kit
- Made in the USA

Specifications

Physical	
Dimensions	Height: 12.5″ 318 mm Width 11.0″ 279 mm Depth 6.4″ 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	-4°F to 122°F (-10°C to 50°C)
Storage Temp	-4°F to 158°F (-20°C to 70°C)
Relative Humidity	0 – 100% RH
Enclosure Rating	NEMA-4X enclosure, waterproof, chemical, and weather resistant.
Inputs	

Prepared by Russmill Safety from publicly available manufacturer information and our product listing. This is not the manufacturer's original publication. For legally required safety data, use the manufacturer's official Safety Data Sheet.

4-20 mA	Accepts any 4-20 mA transmitter (24 VDC, 2 or 3 wire). A wide variety of RKI sensors are available with4-20 mA signals. Wiring distances up to 8,000 feet.
Outputs	
Relays	2 relays per channel 10 amp rating, SPDT isolated contacts. 1 set of common relays: 2 for gas alarm levels 1 for malfunction Relays fully programmable for: Increasing or decreasing alarms Latching or self reset Normally energized or normally de-energized Time delay for alarm on and alarm off
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 steady tone, mounted on enclosure.
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	85-264 VAC or 24 VDC standard Battery backup option available
Approvals	CSA Certified to CSA C22.2 No. 1010 and ANSI/ISA S82.01
Warranty	One year materials and workmanship.
Partial List Of Detectable Gases Many other gases or ranges available. Contact RKI for gases or ranges not listed.	
Ammonia (NH_3)	0 – 75.0 ppm
Arsine (AsH_3)	0 – 0.20 ppm
Boron Trichloride (BCl_3)	0 – 15.0 ppm
Carbon Dioxide (CO_2)	0 – 1.0 %
Carbon Monoxide (CO)	0 – 300 ppm
Chlorine (Cl_2)	0 – 3.0 ppm
Chlorine Dioxide (ClO_2)	0 – 1.00 ppm
Chlorine Trifluoride (ClF_3)	0 – 1.00 ppm
Combustibles	0 -100% LEL
Diborane (B_2H_6)	0 – 30.0 ppm
Fluorine (F_2)	0 – 6.0 ppm
Hydrogen (H_2)	0 – 2000 ppm
Hydrogen Chloride (HCl)	0 – 15.0 ppm
Hydrogen Fluoride (HF)	0 – 9.0 ppm
Hydrogen Sulfide (H_2S)	0 -100.0 ppm

Nitric Oxide (NO)	0 -100.0 ppm
Nitrogen Dioxide (NO_2)	0 – 15.0 ppm
Nitrogen Trifluoride (NF_3)	0 – 30.0 ppm
Oxygen (O_2)	0 – 25.0 %
Ozone (O_3)	0 – 1.0 ppm
Phosphine (PH_3)	0 – 1.0 ppm
Silane (SiH_4)	0 – 15.0 ppm
Sulfur Dioxide (SO_2)	0 – 30.0 ppm
TEOS ($Si(OC_2H_5)_4$)	0 -15/30 ppm

Specifications subject to change without notice.

Information source

Russmill Safety product listing — https://www.russmillsafety.com/products/beacon-800-eight-channel-wall-mount-controller-by-rki-instruments (listing notes product information supplied by the manufacturer, RKI Instruments)

Supplier / distributor contact

Supplier / distributor	Russmill Safety
Store	A1 Queen’s Highway, Suite 2–3, Freeport, Grand Bahama F42190, The Bahamas
USA warehouse (fulfilment)	1526 NW 23rd Avenue, Fort Lauderdale, FL 33311
Phone	Bahamas customer service +1 242 351 7623 · USA +1 954 333 8542 · Freeport store +1 242 688 3336
Email	customerservice@russmillsafety.com (customer service) · sales@russmillsafety.com (sales enquiries)
Website	https://www.russmillsafety.com