Technical Data Sheet

Beacon 110 Single Channel Wall Mount Controller by RKI Instruments

Brand / manufacturer	RKI Instruments
Product codes	SKU: 72-2110RK-02

Product description

RKI Instruments Beacon 110 single-channel wall-mount controller (72-2110RK-02, small red light, no sensor): gas detection simplified, for one point of detection.

Key benefits

- Powerful, low-cost, microprocessor-controlled fixed system controller; simple to install and operate
- Accepts RKI LEL, O2, H2S or CO direct-connect sensors, or any 4-20 mA transmitter (2 or 3 wire, 24 VDC)
- Sensors mount at the housing or wire remotely; long-life sensors (2+ years typical)
- Two programmable alarm levels; audible alarm with reset button; built-in trouble alarm with relay
- 10 A form C relays directly power external alarms and horns
- Backlit digital display shows gas type and concentration; 4-20 mA output
- 115/220 VAC or 24 VDC operation
- Compact, weatherproof NEMA 4X enclosure; complies with lock-out/tag-out standards; external reset switch
- Ships with wall mounting kit
- Made in the USA

Specifications

Physical	
Dimensions	Height: 8.5″ 216 mm Width 7.0″ 178 mm Depth 4.3″ 109 mm
Enclosure	Wall mounting grey polycarbonate with hinged cover.
Conduit Connection	3/4″ NPT conduit hubs, 2 provided. 1 for sensor wiring 1 for power & relay wiring
Wiring Termination	Screw type terminal block 14 gauge max.
Power	Universal 115 VAC & 220 VAC, or 24 VDC nominal, battery backup option available
Controls	3 internal push buttons for setup, programming, and calibration. 1 external push button for alarm reset
Environmental	
Operating Temp	-4°F to 122°F (-20°C to 50°C)

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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	
Direct Wired Sensors	LEL Oxygen Carbon Monoxide Hydrogen Sulfide Remote amp not required for less than 500 feet.
4-20 mA Sensors	Accepts any 4-20 mA transmitter (24 VDC, 2 or 3 wire). A wide variety of RKI/Riken sensors are available with 4-20 mA signals. (See list of detectable gases.) Wiring distances up to 5000 feet
Sampling Methods	Diffusion and sample draw heads available.
Outputs	
Relays	3 relays – 10 amp rating (at 115 VAC), SPDT isolated contacts. 2 relays for gas alarms and 1 trouble relay. Relays fully programmable for: increasing or decreasing alarm, latching or self reset, normally energized or normally de-energized, time delay for alarm on and alarm off
4-20 mA	Signal output, 4-20 mA (maximum load impedance 500 ohms), per channel
24 VDC	24 VDC (400 mA max) output provided to operate sample drawing adapters or other accessories
Display	2 x 8 Alphanumeric display with backlighting.
Audible	Built-in audible alarm, 94 dB, mounted on enclosure Coded output: pulsing = gas alarm, steady = fail
Visual	3 LED’s on the front cover for alarm status indication, and malfunction
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-110-single-channel-wall-mount-controller-by-rki-instruments (listing notes product information supplied by the manufacturer, RKI Instruments)

Supplier / distributor contact

Supplier / distributor	Russmill Safety
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