Technical Data Sheet

Beacon 410A Four Channel Wall Mount Controller by RKI Instruments

Brand / manufacturer	RKI Instruments
Product codes	SKU: 72-2104A

Product description

RKI Instruments Beacon 410A four-channel wall-mount controller (72-2104A, no sensor): highly configurable, microprocessor-based and easy to use.

Key benefits

- Simultaneously displays gas type, readings and status for 4 channels on an OLED display
- Monitors any combination of direct-connect LEL, O2, CO2 and toxic sensors, plus any 4-20 mA transmitter (2 or 3 wire)
- Up to 3 configurable alarm points and up to 3 alarm relays per channel; built-in trouble alarm with relay
- Silenceable audible alarm; alarm reset switch
- 4-20 mA output per channel; Modbus digital output standard
- Min-Max feature retains high and low peaks
- 115/220 VAC or external 24 VDC; optional battery backup and high-visibility strobe
- All features built in: no add-on cards needed
- RFI/EMI resistant; weather and corrosion resistant NEMA 4X enclosure
- Made in the USA

Specifications

Physical	
Dimensions	Height: 12.5” Width 11” Depth 6.4”
Enclosure	NEMA 4X non-metallic for indoor and outdoor locations
Conduit Connection	3/4” NPT conduit hubs, 4 provided, for sensor, power, & relay wiring
Wiring Termination	Screw type terminal block, 14 gauge max
Power	115 VAC & 220 VAC, or 24 VDC nominal, battery backup option available
Controls	Display PCB Control Switches: UP/YES push button switch DOWN/NO push button switch ESCAPE push button switch ENTER push button switch External reset switch On/Off toggle switch
Environmental	
Operating Temp	-4°F to 122°F (-20°C to 50°C)
Storage Temp	-4°F to 158°F (-20°C to 70°C)
Relative Humidity	0 – 95% RH (non-condensing)

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.

Enclosure Rating	NEMA-4X enclosure, chemical and weather resistant
Inputs	
Direct Wired Sensors	LEL, Oxygen, Carbon Monoxide, Hydrogen Sulfide, and Carbon Dioxide. 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. Wiring distances up to 8,000 feet
Sampling Methods	Diffusion and sample draw heads available
Outputs	
Relays	Two flexible, programmable Form-C (C, NO, NC) relays per channel, plus five common relays (Fail, Alarm-1, Alarm-2, Alarm-3, Alarm-Any). Common relays may optionally be assigned to function as additional channel alarm relays, providing for up to three alarm relays per channel. 10A contact rating.
4-20 mA	Signal output, 4-20 mA (maximum load impedance 500 ohms), per channel
RS-485	Modbus format RS-485 serial output of all channel data, including gas reading and alarm status.
Display	Four line OLED display
Audible	Built-in audible alarm, 94 dB, mounted on enclosure Coded output: pulsing = gas alarm, steady = fail
Visual	1. Alarm LEDs (on Display PCB) Alarm 1, yellow Alarm 2, orange Alarm 3, red Fail, yellow 2. Green Pilot LED to indicate AC power connected (on Display PCB) 3. An optional 24 VDC NEMA 4X strobe mounted to top of case.
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-410a-four-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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