

# Ordering Information

When ordering a system, please specify the following components:

- 1) **Controller** — Select the controller based on the number of detector heads or sensors needed
- 2) **Detector Assemblies** (up to 4) — Choose the detector head or sensors to connect with the controller
- 3) **Accessories** — Choose what accessories are needed  
is ordered 49-8104RK 12 AH battery assembly



## Controller Selection

Part#	Description
72-2110RK-02	Beacon 110, <b>single</b> channel controller with small red strobe light (no sensor)
72-2102-08	Beacon 200, <b>two</b> channel controller, 115/220 VAC, with small red strobe light (uses common alarm 1 relay contact for strobe) (no sensors)
72-2104A-13R	Beacon 410A, <b>four</b> channel controller with large strobe light (no sensor)

## Detector Assembly Selection



M2A



Direct Connect



OX-600



Remote Sensor Available

Part#	Description
<b>M2A</b>	
65-2643RK-05	M2A, Oxygen (O2) 0-25%, sensor / transmitter with j-box, cCSA <sub>US</sub> version
<b>Direct Connect</b>	
65-2515RK	Sensor, Oxygen (O2), capillary type, explosion proof with conduit mounting and j-box (no transmitter), CSA version
<b>OX-600</b>	
72-1004	OX-600 oxygen monitor, 0-25%, battery operated (2 AA batteries)
72-1005	OX-600 oxygen monitor, 0-25%, 24 VDC operation (Select this version if used with an RKI controller)
72-1006	OX-600 oxygen monitor, 0-25%, 115 VAC operation

## Accessories



Battery Backup



Auxiliary Flashing Alarm Light



Horn / Strobe Combo



Emergency Stop

Part#	Description
49-8104RK	Standby battery assembly, 24 VDC, 12 AMP hours, for Beacon 110, Beacon 200, Beacon 410, & Beacon 800
51-0055RK	Rotating alarm light, red, 115 VAC, Federal Signal 225-120V-R
51-0131AMB	Horn with strobe, outdoor, panel mounting, 120 VAC, 4 wire, amber lens, Edwards 868STRA-N5
81-1117RK	Cal cup, standard, fixed systems, for conduit mounting, LEL/O2/H2S/CO, (NPT type)
81-1153	Cal cup for OX-600
81-F302RK-LV	Cal kit, fixed for M2A/S2/Direct connect, 34L cyl 100% N2, reg with gauge & knob, cal cup, case & tubing
81-OX600-LV	Cal Kit, fixed for OX-600, 100% N2, reg with gauge & knob, cal cup, case & tubing
82-5220	ESTOP with relay and stack light, 24 VDC power needed



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# Oxygen Monitoring



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# Controller

## Beacon Series

### 1, 2, and 4 Channel Wall Mounts



- Simultaneously monitor up to 4 channels
- OLED display of all 4 channels
- Accepts any 4-20 mA transmitter, 2 or 3 wire
- Accepts oxygen sensors directly wired (no 4-20 transmitter needed)
- Up to 3 programmable alarm levels per channel
- Up to 3 configurable alarm relays per channel
- 4-20 mA analog & Modbus digital output standard
- Audible alarm with silence feature and reset switch
- Built in trouble alarm with relay
- Weather proof NEMA 4X enclosure
- RFI / EMI Resistant
- Weather and corrosion resistant NEMA 4X enclosure
- Optional strobe & battery backup available

Enclosure	NEMA 4X Fiberglass / polyester with lexan window for indoor and outdoor locations.
Power	115 VAC & 220 VAC, or 24 VDC nominal, battery backup option available
Control Buttons	<div><div>• UP/YES</div><div>• ESCAPE</div><div>• External reset switch</div><div>• DOWN/NO</div><div>• ENTER</div><div>• On/Off toggle switch</div></div>
Direct Connect Sensors	Accepts direct wired sensors for LEL, Oxygen, Carbon Dioxide, and toxic gas sensors. 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
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	Alarm LED's (on Display PCB) • Alarm 1, yellow • Alarm 2, orange • Alarm 3, red • Fail, yellow Green Pilot LED to indicate AC power connected (on Display PCB) An optional 24 VDC NEMA 4X strobe mounted to top of case.

# O2 Detector Heads

## M2A

### Explosion Proof Sensor / Transmitter



- Operates with or without controller
- Digital readout with OLED display
- 2 Fully programmable alarm relays and one trouble relay
- Explosion proof
- Non intrusive calibration via magnetic wand

Part#	65-2643RK-05
Sensor Type	Galvanic cell
Measuring Ranges	0 - 25.0% Vol.
Alarm Settings	Two fully programmable alarm set points, increasing / decreasing, latching / self-resetting, on delays, off delays, normally energized or de-energized
Alarm Indication	Visual LEDs. Alarm 1, Amber; Alarm 2, Red; Fail, Red
Relays	Alarm 1, alarm 2, and fail (5 amp form 'C' contacts)
Dimensions	Height: 8.5" (215 mm), Width: 5.2" (132 mm), Depth: 4.5" (114 mm)

## Direct Connect

## Sensor



- Low cost solution
- Remote mount sensor up to 500'
- Explosion proof
- Patented water repellent sensor coating

Part#	65-2515RK
Sensor Type	Galvanic cell
Measuring Range	0-25% Vol.
Location	Operating Environment indoor or outdoor. Explosion proof for Class I, Groups B, C, and D atmospheres.
Temperature	-4°F to 113°F -20°C to 45°C
Housing J-Box	Cast aluminum, explosion-proof, optional stainless steel J-box available
Controllers	Compatible with the following controllers: Beacon 110, Beacon 200, and Beacon 410

## OX-600

## Indoor Stand Alone / Transmitter



- Operates with or without controller
- Unique tri color alarm display
- Remote mount sensor available
- Pressure compensation eliminates false alarms caused by pressure changes

Part#	72-1004 (AA batteries) 72-1005 (24V) 72-1006 (115V)
Sensor Type	Galvanic cell
Sampling Method	Diffusion or remote sampling method
Measuring Range	0-25.0 %Vol. (0.1 %Vol. digit)
Alarms	Two preset alarms
Display	LCD digital display (3 digits, 3 color, green, orange, red backlight)
Power Supply	AA Alkaline Batteries, 24VDC, 115 VAC
Dimensions	Body: approx. 3.14"(W) x 4.7"(H) x 1.4"(D)