

Fixed Systems Solutions

24/7 Continuous Gas Monitoring



INSTRUMENTS

Controllers



Beacon 110



Beacon 200



Beacon 410A



Beacon 800

1-64 Channel fixed systems controllers

Alarm relays

Modbus communication (MC-6400)

Digital readout

Weather proof NEMA 4X enclosure

Audible alarm

Alarm reset button

Optional strobe & battery backup

Fault alarm



Beacon 3200



AC-7400



MC-6400

Instruments	Channels	Alarm levels per channel	Relays per channel	Common relays	Direct connect sensors
Beacon 110	1	2	2	N/A	Yes
Beacon 200	2	2	2	3	Yes
Beacon 410A	4	3	3	5	Yes
Beacon 800	8	2	2	3	No
Beacon 3200	32 Max	3	3†	4	Yes
AC-7400	8/12	4*	0	4*	No
MC-6400	64	4*	0	4*	No

*4 Alarm levels with relays total. † Additional relays available.

Controller



S2



M2A Transmitter



Remote Mount Sensor with Cal Cup



Alarm Relays Activate Ventilation / Exhaust Systems



RKI's diffusion style remote mount detectors allow for easy calibrations in difficult access areas.



AirLink Wireless Solutions

Sensors & Transmitters



Direct Connect Sensor

Cost Effective
Water repellent sensor coating
Explosion Proof



S2 Transmitter

Transmitters 4-20mA output
Explosion Proof
Stainless steel options



M2A Transmitter

Operates with or without controller
OLED display
2 programmable alarm relays
Non intrusive calibration
4-20mA and Modbus outputs



35-3001 Sample Draw

LEL, O₂, H₂S, CO, CO₂, & H₂ available
Multigas versions
Internal sample pump with 100' range



SD-1 Series

Explosion proof, IP-65/67
Monitor ppm or % LEL ranges
Available for H₂, IPA, ACN, and ETO
Hart Communication



T2A Transmitter

2-Wire loop-powered, 4-20 mA output
Electrochemical Sensor
Digital display of gas reading with backlight
3 magnetic-button interface



T3A Transmitter

3-Wire powered, 12 to 35 VDC operating voltage
Electrochemical, infrared or catalytic bead sensors
Digital display of gas reading with backlight
RS-485 Modbus output

Controller



2 Wire

Direct Connect



2 Wire
4 Wire



2 Wire (Most Gases)
3 Wire (IR/LEL)



3 Wire

GD-K88Ai



2 Wire

GD-70D



3 Wire

Toxic & Specialty Transmitters



Smart Sample Draw

GD-70D Intelligent Sample Draw

- Monitor combustibles, O₂, and a wide range of toxics
- Plug and play intelligent sensors retain calibration and sensor data
- Common platform (main unit / sensor / pump) for all detection methods
- No internal tubing (main unit) / No coil (pump)
- Front access, no tools required, easy sensor and pump replacement
- Various communication methods available (4-20mA, LonWorks, and PoE)



Stand Alone Transmitter

Air Alert

- Visual & audible alarms
- 3 Color alarm LEDs with buzzer
- Electrochemical, infrared, or PID sensor element
- Wire powered, 12 to 35 VDC operating voltage, optional AC power supply
- 4-20 mA (3-wire)
- RS-485 Modbus output
- Relay options available
- 3 magnetic-button interface



Toxic Diffusion

GD-K88Ai Toxic Diffusion Sensor / Transmitter

- Diffusion style head
- Digital readout of gas name and concentration
- External control buttons for easy maintenance
- Intrinsically safe design
- Quick response sensors
- Many toxic sensors to choose from
- 3 to 5 year typical sensor life
- Low cost of ownership



PID Transmitter

VOC Pro

- PID sensor options:
 - 10.0 eV lamp / 11.7 eV / 10.6 eV ppb / 10.6 eV ppm
- Wire powered, 12 to 35 VDC operating voltage
- 4-20 mA (3-wire) output
- 3 magnetic-button interface
- RS-485 Modbus output

Digester Gas Monitor

Digester Process Gas Monitor

- Monitors gases produced by digester process
- Corrosion resistant design
 - Housing designed for extreme environments
 - Internal construction for extreme samples
 - Flow system designed to handle corrosive wet samples
- Sample system designed to handle high humidity
- Accurately measures gases with high levels of H₂S present



Indoor Transmitters

OX-600, EC-600 or RI-600 With Optional Remote Sensor

- Operates with or without a controller
- Tri-color visual alarm display:
 - Green=Normal, Yellow=Alarm 1, Red=Alarm 2
- Large easy to read digital display
- Three power options: 115 VAC, 24 VDC, or 2 AA alkaline
- Operates up to 1 year on one set of AA alkaline batteries



OX-600 (O₂)
0 ~ 25 vol%



Remote Sensor



EC-600 (CO)
0 ~ 150 ppm (1ppm / digit)



RI-600 (CO₂)
0 ~ 2k, 5k, 10k



Accessories

Horns & Strobes

Non Hazardous Location

Lights or Strobes with Horns 4 Wire (Strobe and Horn Wired Separately)



Horn with Strobe
115 VAC / 24 VDC,
4 Wire
Amber, Blue or Red



Horn with Strobe
NEMA 3R, 4 Wire,
24 VDC
Amber or Red

Lights or Strobes with Horns 2 Wire



Flashing Alarm Light
with Horn
115 VAC / 24 VDC
Red, Blue or Amber



Strobe with Horn
115 VAC / 24VDC,
NEMA 4X / 3R
Amber, Blue or Red

Lights, Strobes, or Horns



Rotating Alarm 120V
Green, Amber, Red
or Blue



Strobe NEMA 3R / 4X
Red Housing
Amber, Red or Blue



Stack Lights / Horns
24 VDC / 115 VAC



24 VDC Vibrating
Horn

Hazardous Location

Class I Div 1 Strobes or Horns



Strobe Light
115 VAC / 24 VDC
Clear, Amber, Blue,
Green or Red



Horn 115 VAC



Horn / Xenon Strobe Combo
Class I, Div 1,
Zone 1 24 VDC

Class I Div 2 Strobes or Horns



Strobe Light
115 VAC / 24 VDC
Red or Amber



Horn 115 VAC

Other Accessories



E-mail / Text generator



ESTOP shut off



Telemetry Solutions

Design

Install

Maintain

Turnkey Services

Measurable Gases	Symbol	TLV/TWA	Range	Diffusion Detector	Sample Draw
Acetic Acid	CH ₃ COOH	1.5 PPM	30 PPM	—	GD-70D
Ammonia	NH ₃	25 PPM	75, 100, 200, 400, 1k PPM	GD-K88Ai / DC / S2 / M2A / T3A*	GD-70D
Arsine	AsH ₃	5 PPB	0.2, 1.5 PPM	DC / S2 / M2A / GD-K88Ai	GD-70D
Benzene	C ₆ H ₆	0.5 PPM	various PPM	SD-1GH	GD-70D
Boron Trichloride	BCl ₃	HCl C 0.7 PPM	15 PPM	GD-K88Ai	GD-70D
Boron Trifluoride	BF ₃	HF 0.1 PPM	9 PPM	—	GD-70D
Bromine	Br ₂	0.1 PPM	1 PPM	GD-K88Ai	GD-70D
Butane	C ₄ H ₁₀	LEL = 1.9%	100% LEL	DC / S2 / M2A / SD-1GP / PS2	35-3001 / GD-D58GH / GD-70D
Carbon Dioxide PPM	CO ₂	5,000 PPM	2k, 5k, 10k PPM	RI-600 / DC / S2 / M2A	35-3001
Carbon Dioxide %Vol.	CO ₂	5,000 PPM	1.5, 5, 20, 50, 60, 100%	RI-600 / DC / S2 / M2A / T3A*	35-3001
Carbon Monoxide	CO	25 PPM	30, 75, 150 PPM	GD-K88Ai	GD-70D
Carbon Monoxide	CO	25 PPM	300, 500 PPM	EC-600 / DC / S2 / M2A / M Series / T3A*	35-3001-CO
Chlorine	Cl ₂	0.1 PPM	3, 10, 20 PPM	GD-K88Ai / DC / S2 / M2A / T3A*	GD-70D
Chlorine Dioxide	ClO ₂	0.1 PPM	1, 5 PPM	DC / M2A / T3A*	—
Chlorine Trifluoride	ClF ₃	C 0.1 PPM	0.6 PPM	—	GD-70D
Combustibles LEL	LEL	—	100% LEL	DC / S2 / M2A / T3A* / SD-1GP / PS2	35-3001 / GD-D58 / GD-70D
Combustibles PPM	PPM	—	various PPM	SD-1GH	GD-70D / GD-D58GH
Diborane	B ₂ H ₆	0.1 PPM	0.3 PPM	GD-K88Ai	GD-70D
Dimethylamine	DMA	5 PPM	15 PPM	GD-K88Ai	GD-70D
Dichlorosilane	DCS	HCl C 2 PPM	15 PPM	GD-K88Ai	GD-70D
Disilane	Si ₂ H ₆	C 2 PPM	15 PPM	GD-K88Ai	GD-70D
Fluorine	F ₂	0.1 PPM	3 PPM	—	GD-70D
Formaldehyde	HCHO	C 0.3 PPM	1, 10, 500 PPM	T3A*	FP-330
Germane	GeH ₄	0.2 PPM	0.2, 0.8 PPM	—	GD-70D
Halocarbons	HCFC	Various	0 - 5,000 (typ)	—	RI-257 / GD-70D
Hexane	C ₆ H ₁₄	—	2,000 PPM	SD-1GH	GD-70D / GD-D58GH
Hexane	C ₆ H ₁₄	LEL = 1.1%	100% LEL	S2 / SD-1GP / DC / M2A / PS2	35-3001 / GD-D58
Hydrocarbon LEL	HC	—	100% LEL	M2A / S2 / SD-1GP / DC / PS2	35-3001-LEL / GD-D58 / GD-70D
Hydrocarbon PPM	HC	—	various PPM	SD-1GH	GD-70D / GD-D58GH
Hydrocarbon %Vol.	HC	—	5%, 2%, 30%	DC / S2 / M2A / SD-1 / T3A* H2 Specific / PS2	GD-70D
Hydrogen LEL	H ₂	LEL = 4%	100% LEL	DC / S2 / M2A / SD-1GP / H2 Specific / PS2	GD-70D / GD-D58
Hydrogen PPM	H ₂	—	4, 10, 2,000 PPM	H2 Specific / SD-1GH / T3A*	GD-70D / GD-D58GH
Hydrogen Bromide	HBr	C 2 PPM	9, 10 PPM	—	GD-70D
Hydrogen Chloride	HCl	C 2 PPM	10, 15, 30 PPM	T3A*	GD-70D
Hydrogen Cyanide	HCN	STEL C 4.7 PPM	15, 30 PPM	DC / S2 / M2A / GD-K88Ai / T3A*	GD-70D
Hydrogen Fluoride	HF	0.5 PPM	9, 10 PPM	T3A*	GD-70D
Hydrogen Iodide	HI	—	5 PPM	—	GD-70D
Hydrogen Peroxide	H ₂ O ₂	1 PPM	400 PPB, 3 PPM	—	GD-70D
Hydrogen Selenide	H ₂ Se	0.05 PPM	.2 PPM	—	GD-70D
Hydrogen Sulfide	H ₂ S	0.1, 1 PPM	1, 30 PPM	GD-K88Ai-H ₂ S	GD-70D
Hydrogen Sulfide	H ₂ S	1 PPM	100, 2k PPM	DC / S2 / M2A / M-Series / T3A*	35-3001-H ₂ S
Iodine	I ₂	STEL C 0.1 PPM	1 PPM	—	GD-70D
Isobutane	C ₄ H ₁₀	LEL = 1.8%	100% LEL	DC / S2 / M2A / GD-A80 / PS2	35-3001 / GD-D58 / GD-70D
Isopropyl Alcohol	IPA	400 PPM	10, 2k PPM	SD-1GH	GD-70D / GD-D58GH
Methane	CH ₄	LEL = 5%	100% LEL	DC / S2 / M2A / SD-1GP / PS2	GD-70D / GD-D58
Nitric Acid	HNO ₃	2 PPM	20 PPM	—	GD-70D
Nitric Oxide	NO	25 PPM	100 PPM	GD-K88Ai / T3A*	GD-70D
Nitrogen Dioxide	NO ₂	0.2 PPM	9, 15, 20 PPM	GD-K88Ai / T3A*	GD-70D
Nitrogen Tetraoxide	N ₂ O ₄	NO ₂ 0.2 PPM	15 PPM	—	GD-70D
Nitrogen Trifluoride	NF ₃	10 PPM	30 PPM	—	GD-70D
Oxygen	O ₂	—	25%, 40%	OX-600 / DC / S2 / M2A / T3A*	35-3001-OXY / GD-70D
Ozone	O ₃	0.1 PPM	0.6, 5, 100 PPM	T3A*	GD-70D
Pentane	C ₅ H ₁₂	LEL = 1.5%	100% LEL	DC / S2 / M2A / SD-1GP / PS2	35-3001 / GD-D58
Phosphine	PH ₃	0.05 PPM	1, 2, 5 PPM	GD-K88Ai / DC / S2 / M2A / T3A*	GD-70D
Propane	C ₃ H ₈	LEL = 2.1%	10 PPM, 100% LEL	DC / S2 / M2A / SD-1GP / PS2	35-3001 / GD-D58 / GD-70D
Silane	SiH ₄	5 PPM	0.5, 15 PPM	GD-K88Ai	GD-70D
Silicon Tetrachloride	SiCl ₄	HCl C 2 PPM	15 PPM	GD-K88Ai	GD-70D
Silicon Tetrafluoride	SiF ₄	HF 0.5 PPM	9 PPM	—	GD-70D
Sulfur Dioxide	SO ₂	0.25 PPM	1, 6, 10, 20, 15, 30 PPM	DC / S2 / M2A / GD-K88Ai / T3A*	GD-70D
Sulfur Tetrafluoride	SF ₄	HF 0.5 PPM	9 PPM	—	GD-70D
Tetraethyl Orthosilicate	TEOS	10 PPM	15 PPM	—	GD-70D
Trichlorosilane	TCS	HCl C 2 PPM	15 PPM	—	GD-70D
Trimethoxy Phosphate	TMP	2 PPM	15 PPM	—	GD-70D
Trimethoxyboron	TMB	—	500 PPM	—	GD-70D
Toluene	C ₆ H ₅ CH ₃	20 PPM	various PPM	SD-1GH	GD-70D / GD-D58GH
Tungsten Hexafluoride	WF ₆	HF 0.5 PPM	9 PPM	—	GD-70D
1,1,1-Trichloroethane	C ₂ H ₃ Cl ₃	350 PPM	0 - 2,000 PPM	SD-1GH	GD-D58GH
Volatile Organic Compound	VOCs	—	50, 100, 1k, 2k, 6k PPM	SD-1GH / VOC Pro / Air Alert	GD-D58GH

T3A* = T2A / T3A / Air Alert / AirLink 6900 / AirLink T3A / AirLink Alert

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