



# TOXIC DIFFUSION SENSOR/TRANSMITTER

Gas Detection For Life

GD-K88Ai Series



## Features

- 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

## Applications

- Semiconductor manufacturing
- Petrochemical plants
- Refineries
- Water & wastewater treatment plants
- Pulp & paper mills
- Gas, telephone, & electric utilities
- Steel
- Automotive
- Refrigeration
- Food Storage
- Power plants

The GD-K88Ai is a diffusion style toxic gas detection transmitter ideally suited to meet a variety of toxic gas detection needs. You can choose from a wide range of electrochemical toxic gas sensors to install in this model. The GD-K88Ai includes easy to read LCD display and push button controls for calibration. When it is used with optional intrinsic safety barriers the GD-K88Ai is safe for use in hazardous locations. The low profile design is only 1.9 inches thick and is easy to install. The hinged housing makes it easy to maintain. This transmitter can be installed with any RKI controller, or integrated to existing PLC or DCS system via 4-20mA output (24VDC two-wire, loop powered).

At the heart of any gas detector is the sensor. The sensors for the GD-K88Ai are aged and tested over a one to three month period, typically resulting in a three to five year life span, providing a lower cost of ownership for your gas detection system. These fast-responding sensors are robust electrochemical type that feature higher sensitivity and selectivity.

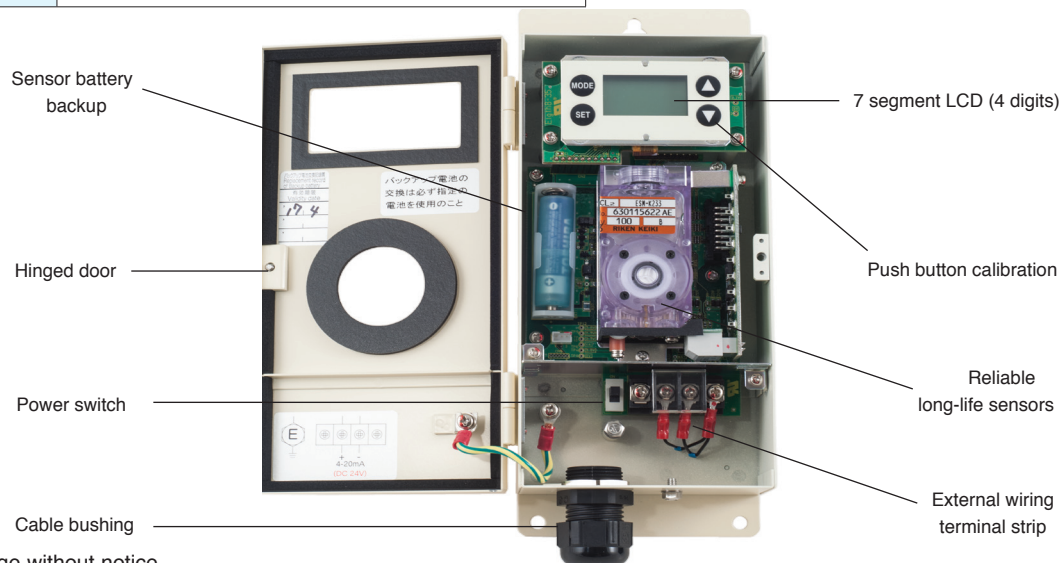
With over 75 years of sensor technology experience, RKI has the knowledge and capability to provide the most advanced detection techniques and manufacture the most stable and long lasting sensors in the world. As a result the GD-K88Ai is one of the most stable and long lasting toxic transmitters on the market.

# GD-K88Ai Series

Model	GD-K88Ai
Display	7-segment LCD (4 digits) for gas name and concentration
Transmission Method	2-wire analog transmission
Transmission Specifications	Analog transmission scheme: 4 - 20 mA DC (load resistance: 300 Ω or less) Digital transmission scheme: HART Communication (Pending)
Power Supply	15 - 27 VDC
Recommended Cable	Shielded cable of 16 AWG wires with shield
Transmission Distance	Up to 0.5 miles (up to 600 m between the detector head and I.S. Barrier)
Recommended Intrinsic Safety Barrier	Zener Barrier (MTL728ac/MTL728+/MTL728-) or Insulating Barrier (MTL5541/RN-221N-EJ/KFD2-SCD-EX1.LK)
Operating Temperature	0 - 40°C (0 - 104 °F)
Operating Humidity	30 - 70%RH (Non-condensing)
Accuracy	+ / - 10% of reading or + / - 5% of full scale (whichever is greater)
Structure	Box type/Wall mounted type
Protection Method	Intrinsically safe when used with appropriate Zener I.S. barrier
Intrinsic Safety Rating	ExiallCT4
Intrinsic Safety certification number	TC20741(TIIS in Japan)
External Dimensions	Approx. 3.9 in (W) x 9.5 in (H) x 1.9 in (D) (projection portions excluded)
Weight	2 lb.
Warranty	1 year

Partial List of Detectable Gases	
Gas	Range
Ammonia (NH <sub>3</sub> )	0 - 75.0 ppm
Arsine (AsH <sub>3</sub> )	0 - 0.20 ppm
Carbon Monoxide (CO)	0 - 150 ppm
Chlorine (Cl <sub>2</sub> )	0 - 3.00 ppm
Diborane (B <sub>2</sub> H <sub>6</sub> )	0 - 0.30 ppm
Disilane (Si <sub>2</sub> H <sub>6</sub> )	0 - 15.0 ppm
Fluorine (F <sub>2</sub> )	0 - 3.00 ppm
Germane (GeH <sub>4</sub> )	0 - 0.60 ppm
Hydrogen Bromide (HBr)	0 - 9.00 ppm
Hydrogen Cyanide (HCN)	0 - 30.0 ppm
Hydrogen Chloride (HCl)	0 - 15.0 ppm
Hydrogen Fluoride (HF)	0 - 9.00 ppm
Hydrogen Sulfide (H <sub>2</sub> S)	0 - 30.0 ppm (optional 0 - 1.00 ppm)
Nitric Oxide (NO)	0 - 100.0 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	0 - 15.0 ppm
Phosphine (PH <sub>3</sub> )	0 - 1.00 ppm
Silane (SiH <sub>4</sub> )	0 - 15.0 ppm
Sulfur Dioxide (SO <sub>2</sub> )	0 - 6.00 ppm

Other gases or ranges available. Contact RKI if not listed



\* Specifications subject to change without notice.



## Authorized Distributor:

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