



# SMART SENSOR/TRANSMITTER WITH READOUT

Gas Detection For Life

GD-K77D Series



## Features

- LED digital display
- Sensor information and calibration is stored within sensor memory
- Several data transmission options available
- Zero suppression and correction
- Housing design for narrow wall mounting locations
- Self-diagnostic functions by microprocessor
- Electrochemical sensors for most semiconductor gases
- Built-in sampling pump
- Easy replacement of pump and sensor
- Two alarm levels with relays, plus trouble alarm
- 24VDC operation
- Optional NEMA 4X housing available

## Applications

- Semiconductor
- Chemical Processing
- Laboratory
- Manufacturing
- HVAC

The GD-K77D is a complete sample drawing gas monitor, including digital readout and alarm relays. A new gas sensor technology using an intelligent sensor for remote location calibration and setup is used. The new GD-K77D sensors are designed to provide a longer time period between calibrations. Calibration intervals have been cut in half to 12 months of on-line service which equates to reduced maintenance cost. In addition, the sensors can be calibrated away from the gas detector installation, for example in a service area or offsite. This eliminates the inconvenience of having calibration gases in the fab or monitoring location. GD-K77D easily connects to an existing PLC system and is ideal for applications needing a local readout or where a relay control is needed.

<b>Model</b>	<b>GD-K8A</b>
<b>Detection principle</b>	Electrochemical cell
<b>Detection method</b>	Sample drawing type
<b>Signal transmission</b>	Analog transmission (4-20 mA) Two wire digital transmission
<b>Display</b>	Digital LED display of gas concentration, 4 digits
<b>Gas alarms</b>	Two alarm levels: 1st alarm (Yellow LED), 2nd alarm (Red LED)
<b>Dry outputs for remote alarms</b>	Dry contact relay for 1st, 2nd, and trouble alarms (Normally Open or Normally Closed)
<b>Alarm response time</b>	Approximately 10 - 15 seconds when exposed to gas concentration of 1.6 times alarm level for most gases (Same as T60)
<b>Self diagnostic function</b>	Trouble, low flow, system failure, communication error
<b>Operation temp. &amp; humidity</b>	0 ~ 40°C, 30 ~ 85% RH
<b>Applicable cable</b>	Shielded cable 3C, 1.25 sq (18 gauge) Shielded twisted one pair cable, 1.25 sq (18 gauge)
<b>Enclosure</b>	Wall mounting
<b>Power</b>	24 VDC
<b>Dimensions</b>	2.8" (W) x 6.7" (H) x 6.0" (D), approximately 4.4 lbs 70 mm (W) x 170 mm (H) x 153 mm (D), approximately 2 kg

## Partial List Of Detectable Gases

Many other gases or ranges available. Contact RKI for gases or ranges not listed

Ammonia (NH <sub>3</sub> )	0 - 75.0 ppm
Arsine (AsH <sub>3</sub> )	0 - 0.20 ppm
Arsine (AsH <sub>3</sub> )	0 - 15.0 ppm
Arsine (AsH <sub>3</sub> )	0 - 300 ppm
Chlorine (Cl <sub>2</sub> )	0 - 3.0 ppm
Chlorine Dioxide (ClO <sub>2</sub> )	0 - 1.00 ppm
Chlorine Trifluoride (ClF <sub>3</sub> )	0 - 1.00 ppm
Diborane (B <sub>2</sub> H <sub>6</sub> )	0 - 30.0 ppm
Fluorine (F <sub>2</sub> )	0 - 6.0 ppm
Hydrogen Chloride (HCl)	0 - 15.0 ppm
Hydrogen Fluoride (HF)	0 - 9.0 ppm
Hydrogen Sulfide (H <sub>2</sub> S)	0 -100 ppm
Nitric Oxide (NO)	0 -100 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	0 - 15.0 ppm
Oxygen (O <sub>2</sub> )	0 - 25.0 %
Ozone (O <sub>3</sub> )	0 - 1.0 ppm
Phosphine (PH <sub>3</sub> )	0 - 1.0 ppm
Silane (SiH <sub>4</sub> )	0 - 15.0 ppm
Sulfur Dioxide (SO <sub>2</sub> )	0 - 30.0 ppm

\* Specifications subject to change without notice.



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