

## GS290K Gas Detector

### SPECIFICATIONS

Standby Current:	<600µA @ 24
Maximum Alarm Current :	<7 mA @ 24 VDC (Led on)
Operating DC Voltage Range:	12 to 30 VDC
DC Current Consumption:	<50mA @ 24VDC
Operating Humidity Range:	10% to 93% Relative Humidity, Non-condensing
Operating Temperature Range:	-10°C to50°C
Stabilization Startup Time:	max 2 min.
Covering Area:	max 50 m3
Dimensions:	90 x 90 x 38 mm

### GENERAL DESCRIPTION



The GS290K Gas Detector is designed reporting gas leakage condition.

Detect all sorts of combustible gases, natural gas (methane), bottled gas (propane), LPG (Liquified petroleum Gas), CNG (natural gas), coal gas, including town gas.

When the Gas Leakage perceived, it transmits an analog representation over a communication line to the control panel.

There are four leds on the device to indicate Alarm Indicators, Error Indicators, Ready Indicators and power supply.

### INSTALLATION

The installation must be done according to which gas will be perceived.

CNG ( Consantrated Natural Gas ) is light weight from air. So in order to perceive CNG the detector should be mounted 10-30cm below from the ceiling.

LPG ( Liquified Petroleum Gas ) is heavy from the air; The Gas Dedetctor should be mounted 10-30 cm above from the floor.

If the installer aims all kind of gases that the detector senses, it should be mounted at the level of approximately human breathing level.

The alarm should not be located close to any obstacles preventing natural air circulation. It should also not be located in a draft or close to a cooker (cooking smells and other fumes can have a bad influence on gas detection).

The fire detector consists of two main parts: a bracket and a detector body part. The body part consists of a circuit board. When mounting first fix the bracket part. Connect cable connections and place the cover part.

Connect first the DC power terminals. There are two terminals for DC power While connecting the wires Take care for the polarity.

Also there are three terminals for relay contact (NC,Com,NO) This terminals for conventional alarm panel or valve connection

## WIRING

Proper wire gauges should be used. The installation wires should be color-coded to limit wiring mistakes and ease system troubleshooting. Improper connections will prevent a system from responding properly in the event of gas leak. Cable connections are shown in figure 1.

Remove power from the communication line before installing sensors.

The power and relay connections are separate, so take care when doing connection.

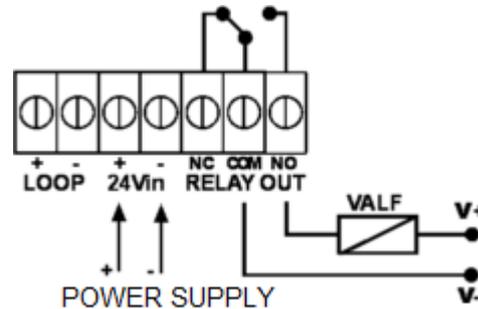


Figure 1- Wiring Connection

## 5. OPERATION AND TESTING

Check and test the gas alarm after installation.

It should be tested weekly and check after re-occupation following a holiday.

After turn on the power, the Power LED is on, and then the unit would take 60 to 150 seconds to warm up.

In the warm up time, the Yellow READY LED would flashes until end of the warm up period.

When the calibration and warm-up procedure finish, the READY LED will lit continuously.

Press and hold the test button for up to 1 to 3 seconds, and the alarm should sound and the LED flash rapidly while buzzer is sounding, after 6 seconds later, the alarm exit the test mode and return to normal operating mode.

To ensure the gas alarm is working, you should test it weekly.

While detecting the gas leaking, the Red Alarm LED would turn on and the buzzer sound, the device will give output signals to the control panel.

### TWO-YEAR LIMITED WARRANTY

We warrant its enclosed smoke detector to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. We make no other express warranty for this smoke detector. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the repair or replacement of any part of the smoke detector which is found to be defective in materials or workmanship under normal use and service during the two year period commencing with the date of manufacture. After calling Code Security's technical support number for a Return Authorization number, send defective units postage prepaid to Code Security local representative office. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.