



CL-20A-C

Natural gas (methane) detector

Features

- The buzzer alarm sound pressure is at least 85 dB at a distance of 3 meters.
- Supports alarm system linkage function to others gas detector
- Provides CAN Bus communication interface
- 110 VAC Working power, no DC adapter is necessary
- Offers 1 Relay output to another alarm device.
- Follow the EN-50194 specifications



Introduction

The CL-20A-C is a gas detector that immediately detects the concentration of natural gas (methane) in the air and provides an early warning by sounding an alarm when 3% ~ 20% of the Lower Explosive Limit (LEL) is reached. The module utilizes a widely used semiconductor gas sensor that combines the advantages of low cost and high reliability to meet the requirement of a 5-year life span for residential use. The design of high sound pressure and alarm linkage function solves the problem that the alarm sound cannot cover a large area due to the sound insulation planning of different floors and spaces. Considering the needs of different alarm types, the module provides 1 relay output, which can be used to connect to the alarm light or other alarm devices to enhance the alarm effect, or to connect to the gas shut-off valve to shut off the gas pipeline and stop the gas delivery. 110VAC power supply and wall-mounted quick-release design allow users to quickly dismantle and install without the need to prepare a DC transformer, which makes it more convenient to deploy and maintain the module. In order to meet the needs of the Internet of Things (IoT), the detector itself provides a CAN bus communication function. Through the integration with the fire information system, the graphical control software can obtain the status of the gas detector in real time, realizing the purpose of monitoring the fire safety of the building.

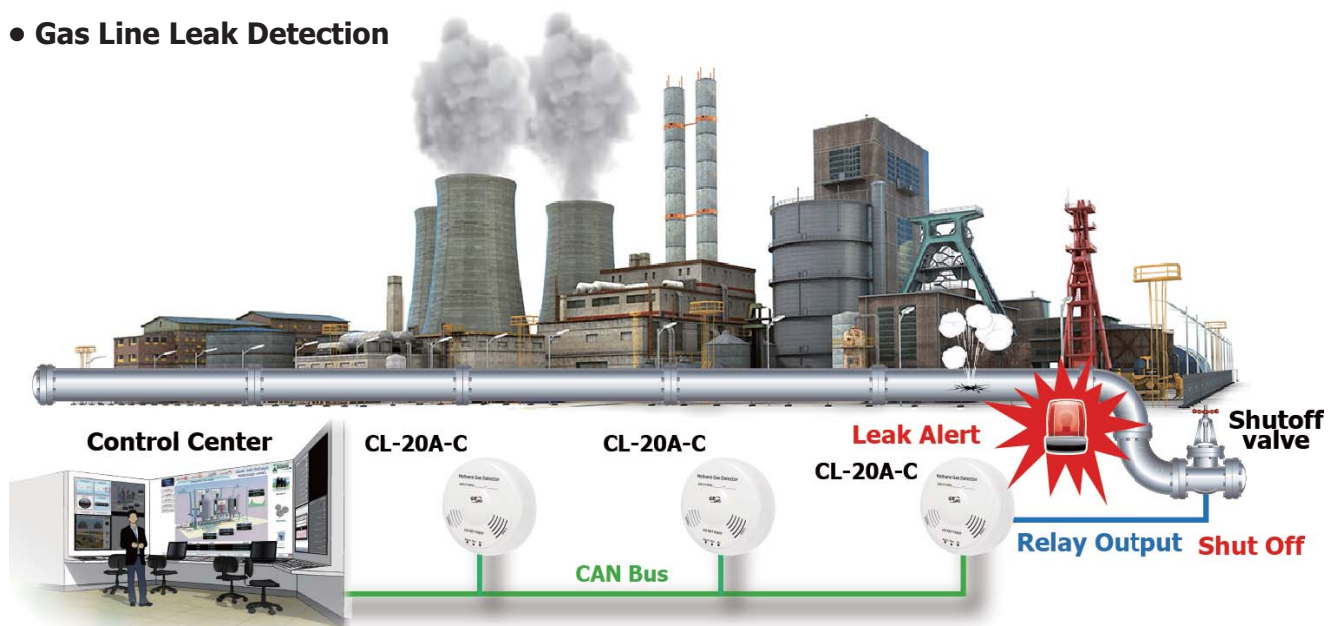
I/O Specifications

CH4 Measurement	
Sensor Type	Semiconductor Sensor
Alarm Level	3000 ppm
Sampling Time	1 second
Response Time	20 seconds
Warm-up Time	1 minute
Life Time	5 years
System	
System Alarm	CH4
Real Time Clock	Yes
Data Logger	Yes, up to 450,000 records
Digital Input	
Channels	1
Type	1 x Dry Contact
Isolation	Non-isolated
Relay Output	
Channels	1
Type	Form A, SPST
Contact Rating	30 VDC @ 0.2 A or 250 VAC @ 0.2 A
CAN	
Ports	1
Baud Rate	125 kbps
Isolation	None
Terminal Resistor	120Ω for CAN_H and CAN_L by DIP switch
Specification	ISO-11898-2 CAN 2.0A

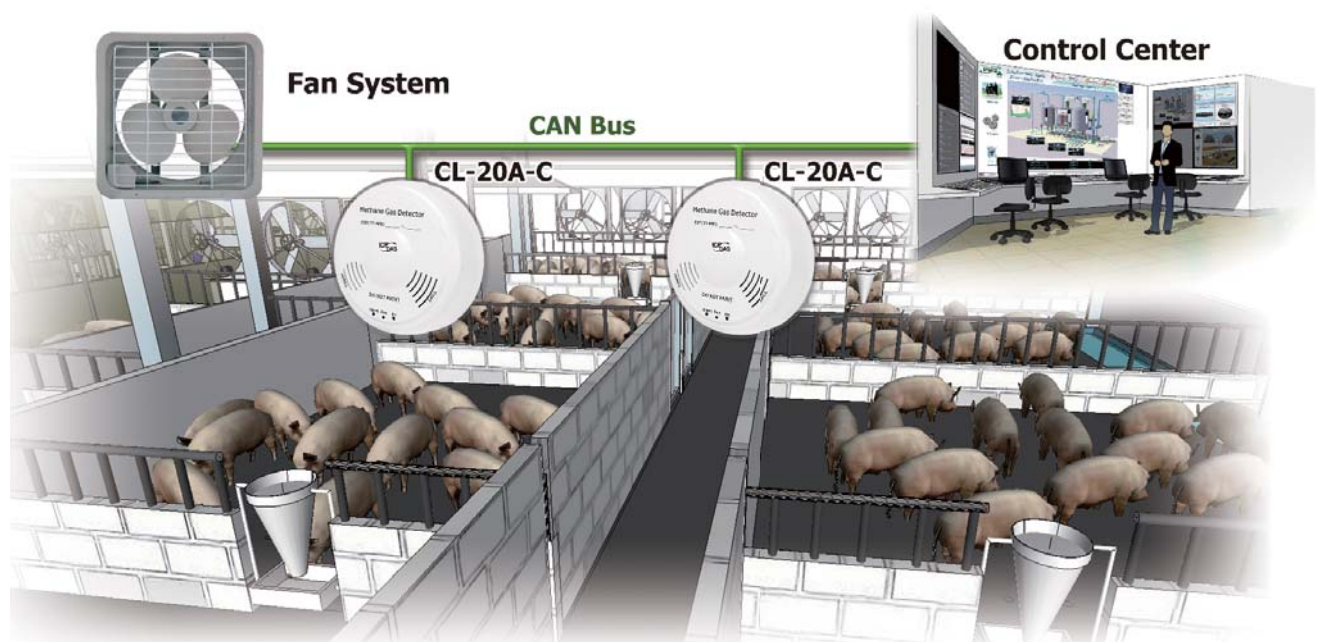
Power	
Consumption	4.5 W
Powered from Terminal Block	100 ~ 220 VAC, 50Hz / 60Hz
Mechanical	
Dimensions (mm)	Ø 130 x 49 (Ø x H)
Installation	Ceiling Mounting/Wall Mounting
Ingress Protection Rating	IP20
Environment	
Operating Temperature	-10 ~ 40°C
Storage Temperature	-30 ~ +75°C
Humidity	0 ~ 80% RH, Non-condensing

Applications

• Gas Line Leak Detection



• Biogas Monitoring System for Aquaculture Industry

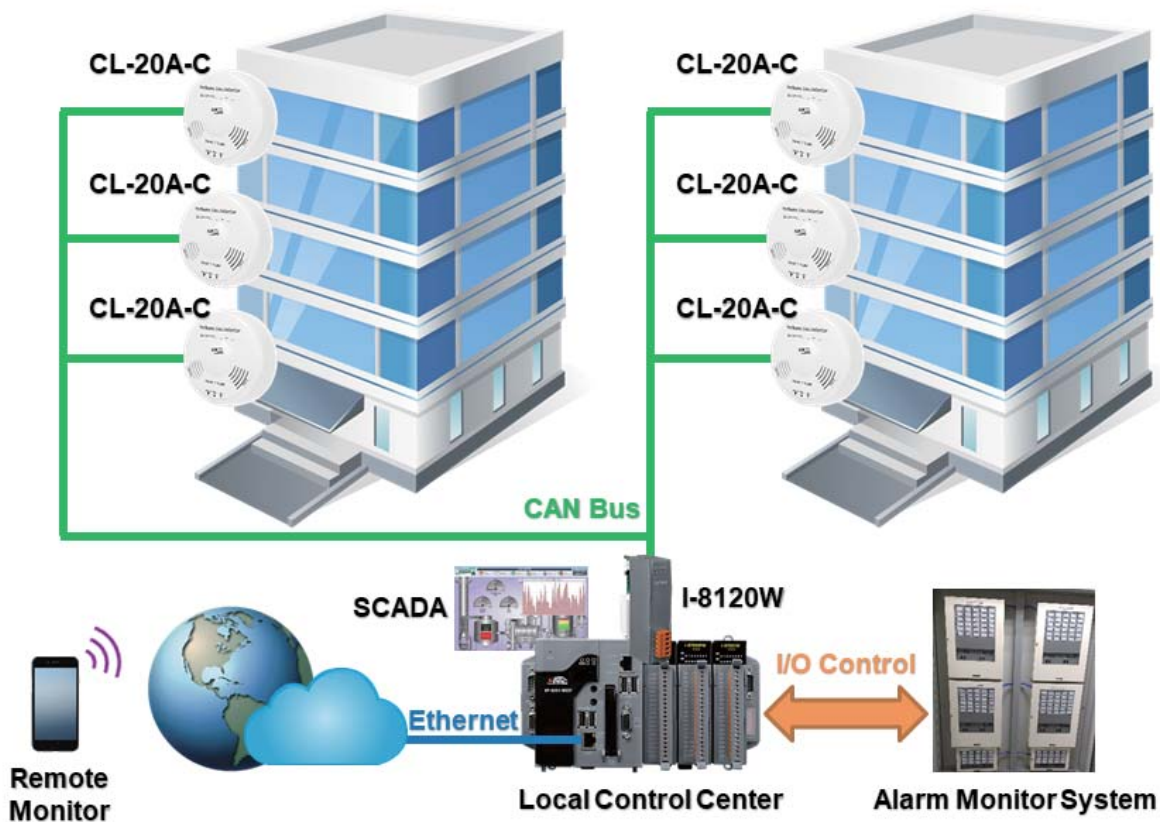


Applications

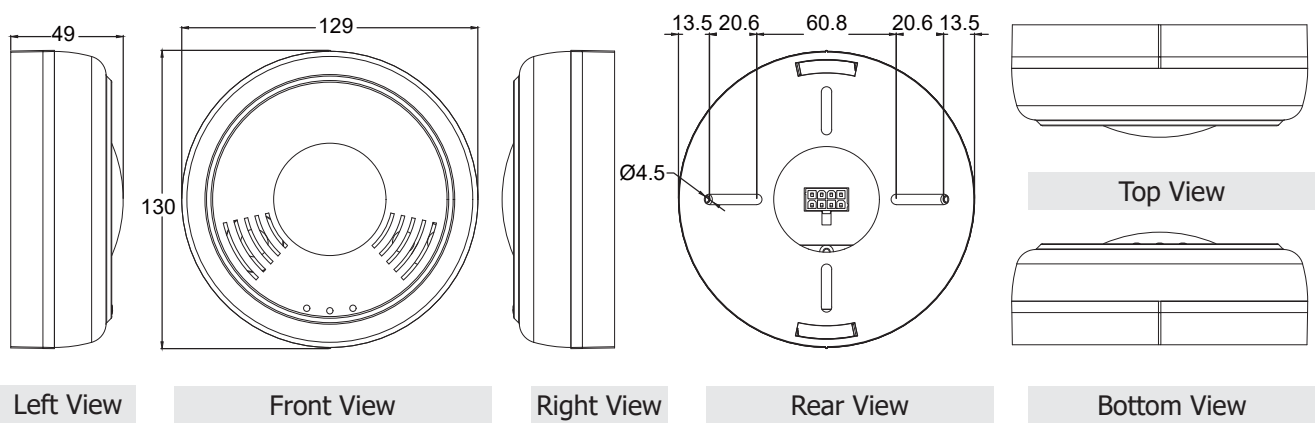
Residential Natural Gas Leak Detection



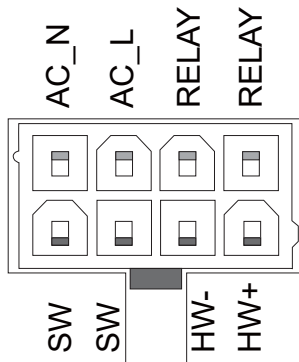
Building Fire Safety Monitoring



■ Dimensions (Units: mm)



■ Pin Assignments



■ Wire Connections

Digital Input	ON Status Readback as 1	OFF Status Readback as 0
Dry Contact		
Relay Output	ON Status Readback as 1	OFF Status Readback as 0
RELAY		

■ Ordering Information

CL-20A-C CR	Natural gas (methane) detector with CAN Bus communication interface (RoHS)
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