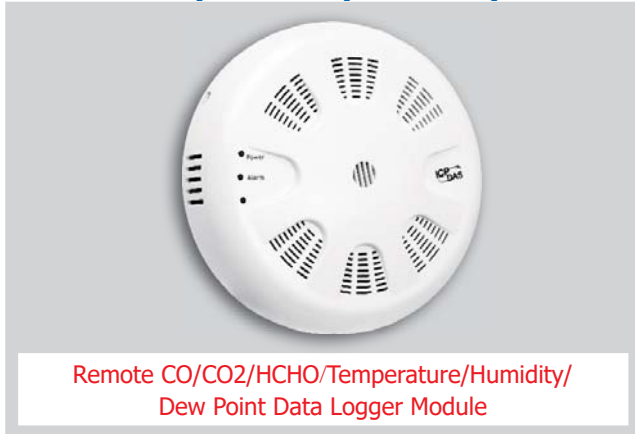


# CL-201-E/202-E/203-E/207-E



## Features

- Able to record CO, CO2, HCHO, Temperature, Humidity and Dew Point Measurements
- Non-dispersive Infrared (NDIR) CO2 Sensor
- Up to 450,000 records with date and time stamps
- Supports the DCON, Modbus RTU/TCP, and MQTT Protocols
- Includes RS-485/Ethernet Communication Interfaces
- Relay Output for Alarm or IAQ Device Control



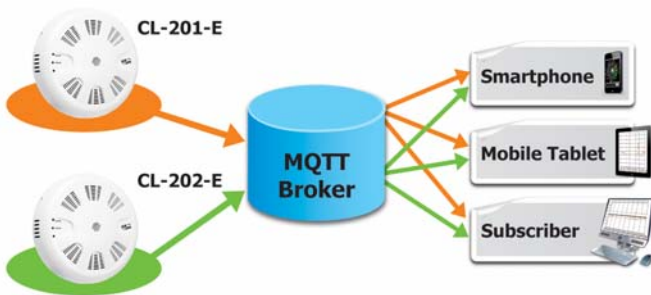
## Introduction

The CL-200 series of data logger devices can be used to record HCHO, CO, CO2, temperature, humidity and dew point information, including the date and time stamps, and are able to store up to 450,000 downloadable records.

Real-time data can be accessed from the CL-200 data logger from anywhere and at any time using the free Windows software, the iOS App, or the Android App, as long as they are connected to the same local network as the data logger.

Support is provided for common industrial protocols such as DCON, Modbus RTU, and Modbus TCP, as well as the emerging machine-to-machine (M2M)/IoT (Internet of Things) connectivity protocol – MQTT. The CL-200 data logger can be connected via widely used communication interfaces including RS-485, Ethernet and PoE, meaning that the device can be easily integrated into existing HMI or SCADA systems, ensuring trouble-free maintenance in distributed control systems.

### Supports the MQTT Protocol for IoT Applications



### Multi-platform Remote Access Software

Real-time data from the CL-200 data logger can be accessed from anywhere and at any time using the DL300 Utility, the iOS or Android App, or via a regular web browser, as long as they are connected to the same local network as the data logger.



## System Specifications

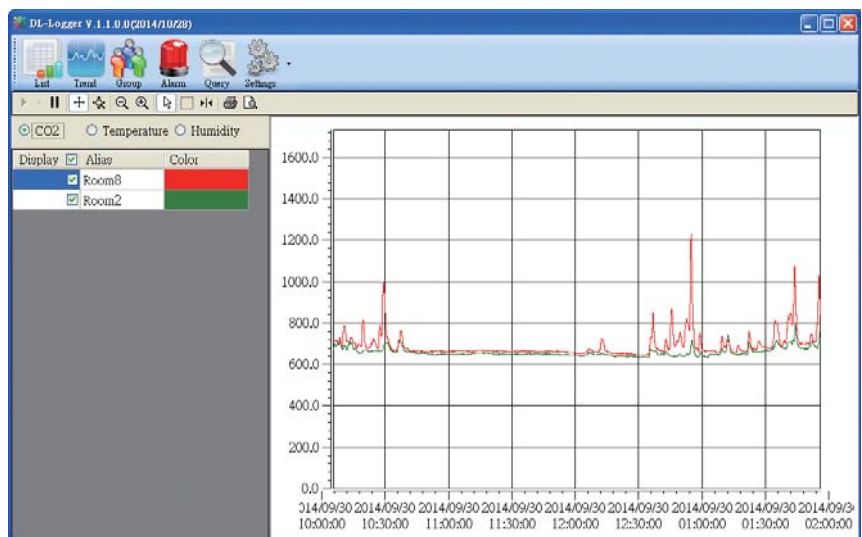
Model	CL-201-E	CL-202-E	CL-203-E	CL-207-E
<b>System</b>				
CO/CO2/HCHO/RH/T Alarm		Yes		
Real Time Clock		Yes		
Data Logger		Yes, up to 450,000 records		
Relay Output		Form A x1, SPST 30 VDC @ 16 A or 250 VAC @ 16 A		
Interface		RS-485/Ethernet		
<b>Electrical</b>				
Powered from Terminal Block		+12 to +48 VDC		
Power Consumption	Non-PoE	2.66 W (Max.)	2.9 W (Max.)	3.24 W (Max.)
	PoE	2.73 W (Max.)	3.22 W (Max.)	3.41 W (Max.)
<b>Mechanical</b>				
Installation		Ceiling Mounting/Wall Mounting		
Protection Class		IP20		
Dimensions (D x H)		Ø 150 mm x 53 mm		
<b>Environment</b>				
Operating Temperature		0 to +50°C		
Storage Temperature		-30 to +75°C		
Humidity		10 to 90% RH, Non-condensing		

## I/O Specifications

Model	CL-201-E	CL-202-E	CL-203-E	CL-207-E
<b>HCHO Measurement</b>				
Range		-		0 to 5 ppm
Resolution		-		≤0.01 ppm
Response Time		-		≤60 seconds
<b>CO Measurement</b>				
Range	0 to 1000 ppm (Electrochemical)	-	0 to 1000 ppm (Electrochemical)	-
Resolution	1 ppm	-	1 ppm	-
Accuracy	±5% of measured value	-	±5% of measured value	-
Response Time	30 seconds	-	30 seconds	-
Warm-up Time	60 seconds	-	60 seconds	-
<b>CO2 Measurement</b>				
Range	-	0 to 9999 ppm (NDIR)		-
Resolution	-	1 ppm		-
Accuracy	-	±40 ppm ±3% of measured value		-
Response Time	-	120 seconds		-
Warm-up Time	-	5 minutes		-
<b>Temperature Measurement</b>				
Range		-10 to +50°C		
Resolution		0.1°C		
Accuracy		±0.6°C		
<b>Relative Humidity Measurement</b>				
Range		0 to 100% RH		
Resolution		0.1% RH		
Accuracy		±5% RH		
<b>Dew Point</b>				
Range		Calculated using temperature and relative humidity		
Resolution		0.1°C		

## Simple and Powerful DL-300 Utility

The DL-300 Utility is a powerful tool that is designed for configuring the modules, monitoring real-time data, grouping DL-300 and CL-200 modules to view and manage the status of distribution groups, downloading log data, which can be exported to a CSV file that can then be imported into any industry-standard software or spreadsheet for analysis.

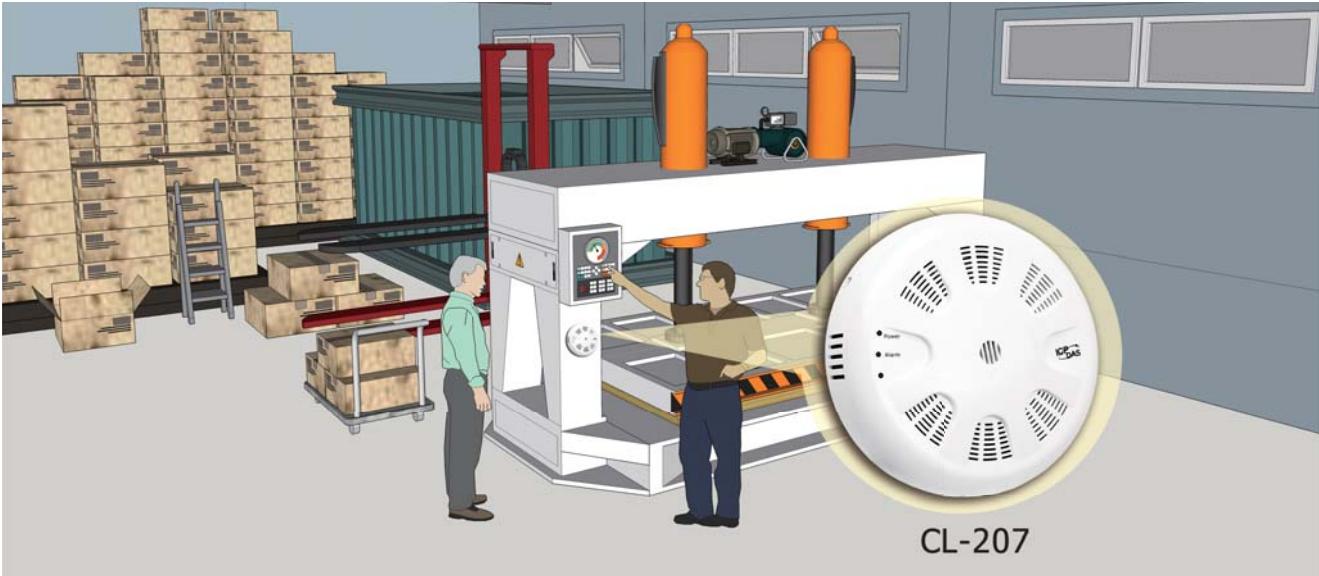


## Applications

- Transportation of Food or Pharmaceuticals
- Blood Stations and Pharmacies
- Warehouse Management
- Food and Beverage Industry (HACCP)
- Building and Energy Management
- Museums, Archives and Galleries

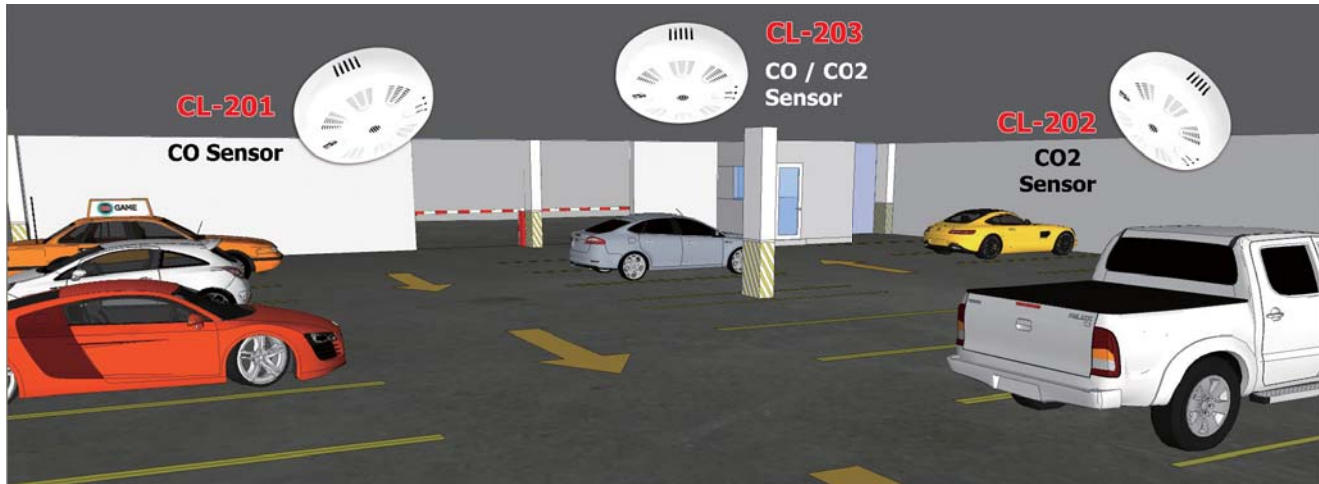
## HCHO (Formaldehyde) Detector Automatic Solution

The **HCHO** detector provides an instantaneous warning of toxic formaldehyde, which can be found in a plywood factory, furniture factory and new interior remodelling house commonly.

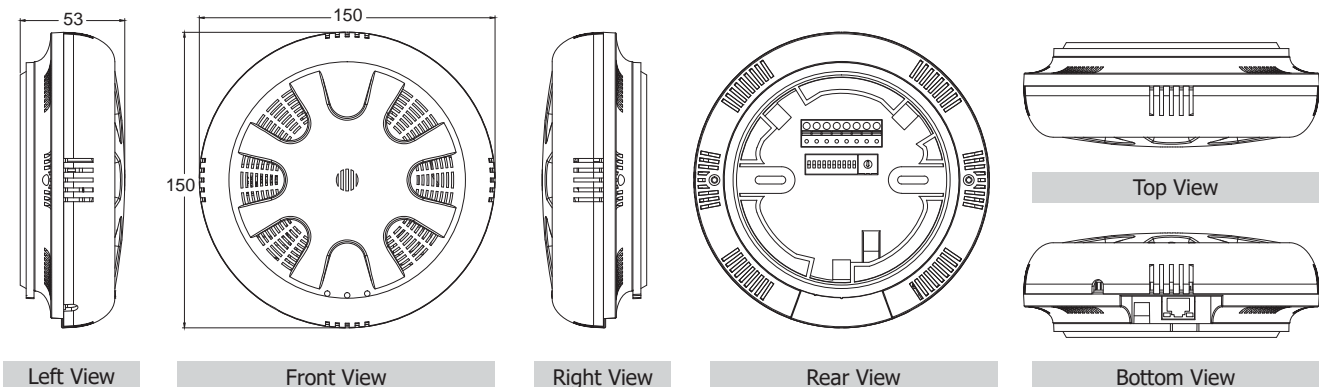


## Indoor or Underground Parking Lot Automatic Monitoring Solution

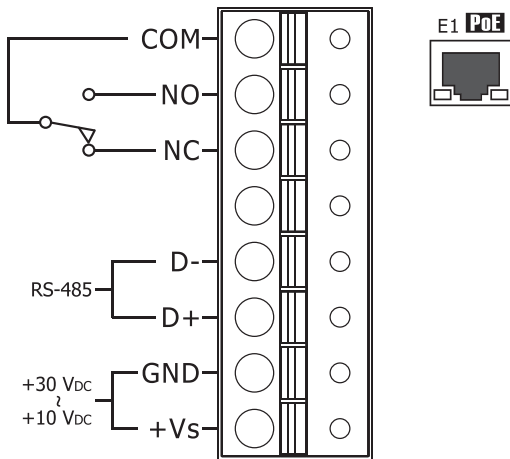
The air quality automation system for indoor or underground parking lot can use the CL-200 series modules to monitor the health and safety information, such as CO, CO<sub>2</sub>, temperature, humidity, dew point, and more...



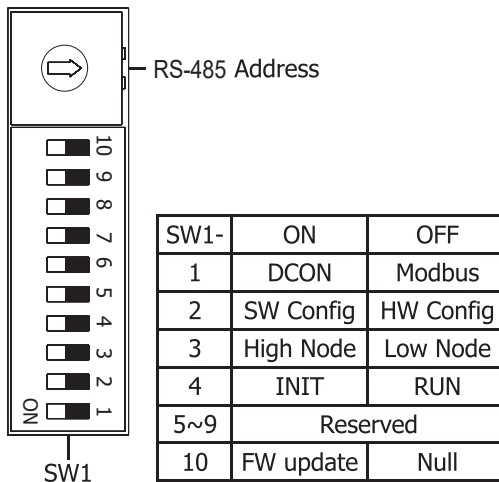
## Dimensions (Units: mm)



## Pin Assignments & Wire Connections

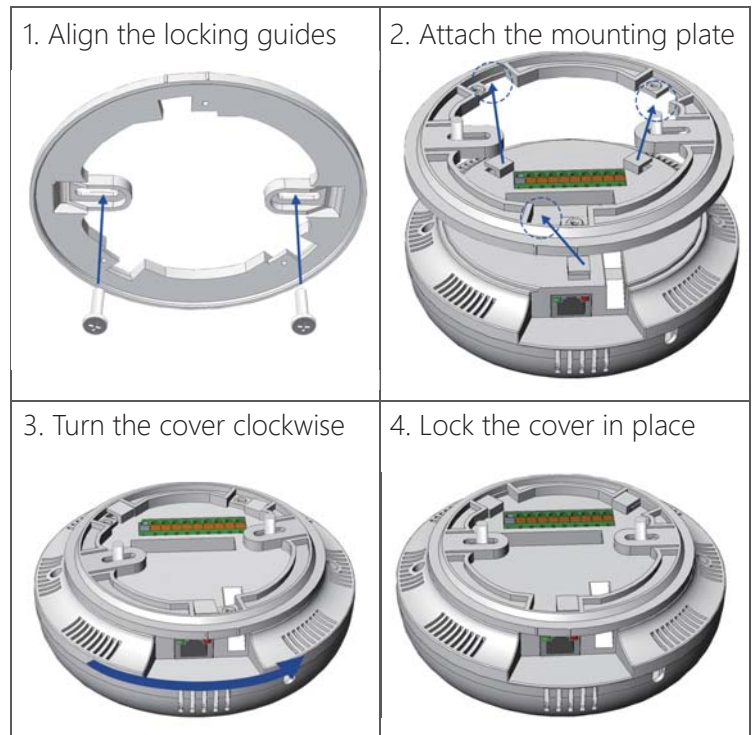


## DIP Switch Settings



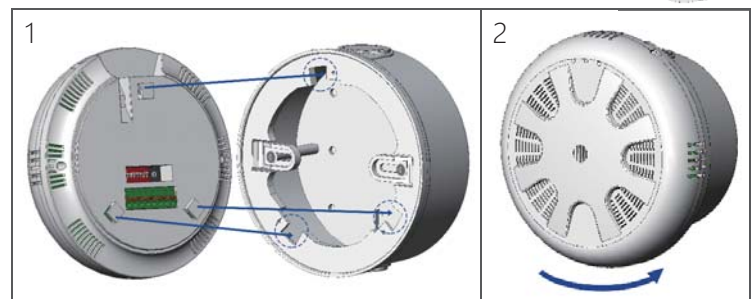
## Mounting

### Ceiling Mounting



### Wall Mounting

(Requires External Wall Box EWB-C150)



## Ordering Information

CL-201-E CR	Remote CO/Temperature/Humidity/Dew Point Data Logger Module (RoHS)
CL-202-E CR	Remote CO <sub>2</sub> /Temperature/Humidity/Dew Point Data Logger Module (RoHS)
CL-203-E CR	Remote CO/CO <sub>2</sub> /Temperature/Humidity/Dew Point Data Logger Module (RoHS)
CL-207-E CR	Remote HCHO/Temperature/Humidity/Dew Point Data Logger Module (RoHS)

## Accessories

EWB-C150	External Wall Box for the CL-200 series
----------	---