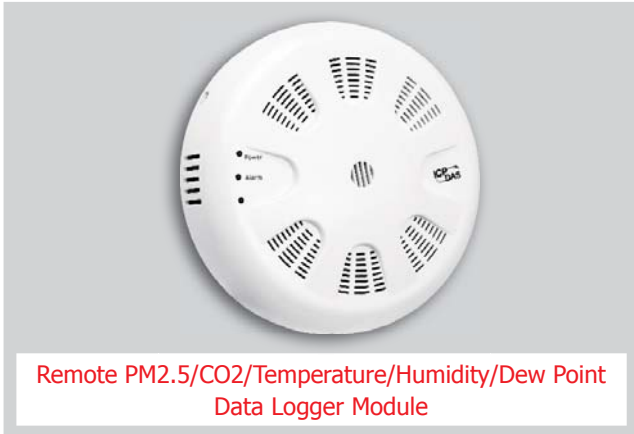


# CL-212



Remote PM2.5/CO2/Temperature/Humidity/Dew Point Data Logger Module

## Introduction

The CL-212 is a data logger module designed to accurately measure PM2.5, CO2, temperature and humidity. It contains RS-485 communication interface that can be used to measure a variety of PM2.5, CO2, temperature and humidity measurements. The data storage memory can store up to 450,000 PM2.5, CO2, temperature and humidity records. The Data Logger Utility is included to allow installation, configuration, retrieval and display of data in a powerful chart format that can be exported to Excel.

## Specifications

Model	CL-212
<b>PM2.5 Measurement</b>	
Range	0 ~ 400 µg/m <sup>3</sup>
Resolution	1µg/m <sup>3</sup>
Response Time	<= 1 min.
<b>CO2 Measurement</b>	
Range	0 to 9999 ppm (NDIR)
Resolution	1 ppm
Accuracy	±30 ppm ±3% of measured value
Response Time	20 seconds
Warm-up Time	60 seconds
<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
<b>System</b>	
PM2.5/CO2/RH/T Alarm	Yes
Real Time Clock	Yes
Data Logger	Yes, up to 40,000 records
Relay Output	Form A×1, SPST 30 VDC @ 16 A or 250 VAC @ 16 A
Interface	RS-485
<b>Electrical</b>	
Powered from Terminal Block	+10 to +30 Vdc
Power Consumption	1.2 W (Max.)
<b>Mechanical</b>	
Installation	Ceiling 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

## Features

- PM2.5, CO2, Temperature, Humidity and Dew Point Measurement
- Non-dispersive Infrared (NDIR) CO2 Sensor
- Up to 450,000 records with date and time stamps
- Support DCON and Modbus RTU Protocols
- Providing RS-485 Communication Interface
- Relay Output for PM2.5/CO2/RH/T Alarm Output
- Measurement Range
  - PM2.5: 0 ~ 400 µg/m
  - CO2: 0 ~ 9999 ppm



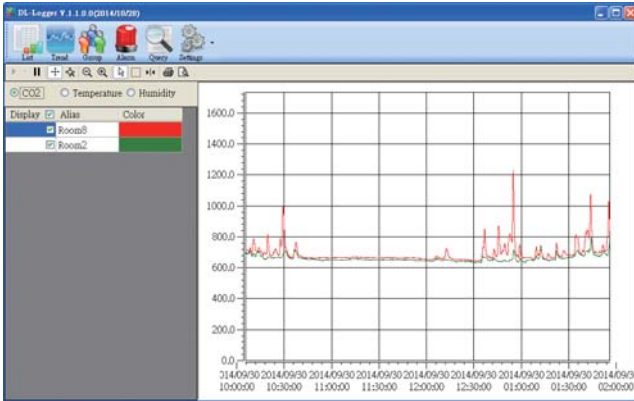
## Applications

Transportation of Food or Pharmaceuticals

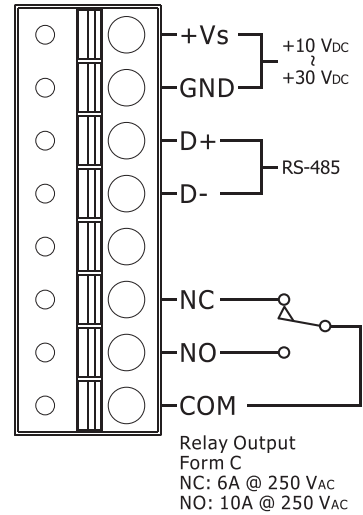
- Food and Beverage Industry (HACCP)
- Blood Stations and Pharmacies
- Building and Energy Management
- Warehouse Management
- Museums, Archives and Galleries

### Free and Power CL200 Utility Software

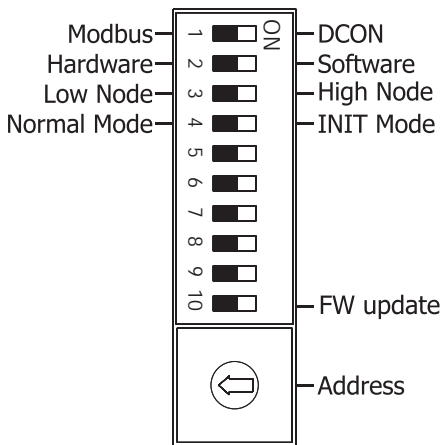
The CL200 Utility is designed for setup modules, monitor real-time data, group CL-200 modules to view and manage the statuses of distribution groups, download log data and export data into a .CSV file that can be imported into any industry-standard software or spreadsheet for analysis.



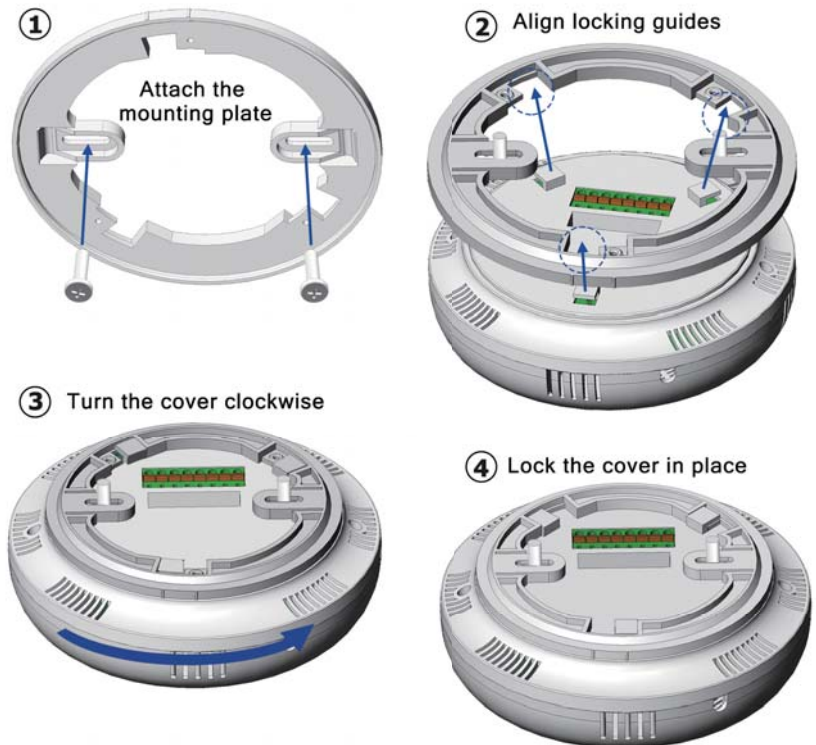
### Pin Assignments & Wire Connections



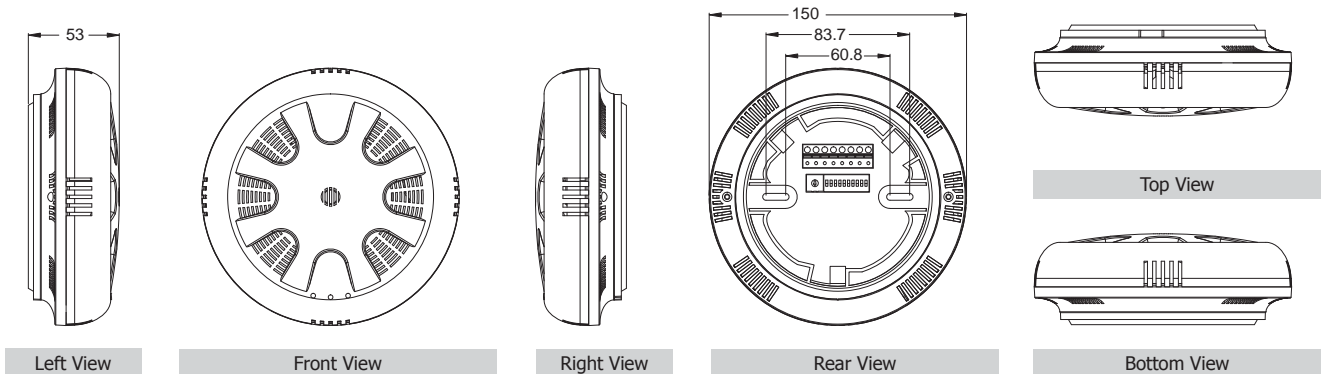
### DIP Switch Settings



### Mounting



### Dimensions (Units: mm)



### Ordering Information

CL-212 CR	Remote PM2.5/CO2/Temperature/Humidity/Dew Point Data Logger Module (RoHS)
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