

<http://www.koganei.co.jp>

ISO9001  
ISO14001



## Creceed

### Cleanliness Monitor

# CC Monitor

**Environmentally friendly**  
**RoHS Compliant Product**



***New proposal for  
contamination control  
Constant monitor for cleanliness  
check makes its debut!***



# Creceed CC Monitor



Environmentally friendly **RoHS** compliant product!

The light scattering principle is used for high-precision and stable detection of floating particles at  $0.3\ \mu\text{m}$  or larger.

Displays the cleanliness level in 10 stages on an LED (equivalent to ISO classes 5 to 8).

In response to contamination problems, multipoint and constant monitoring can ensure early detection of contamination sources.

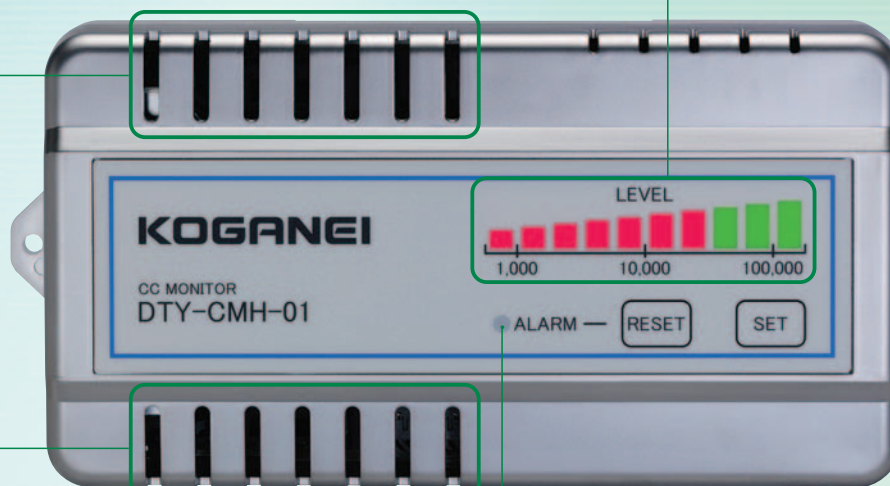
- Because the sampling method uses rising airflow from a built-in heater, there is no need for a suction pump or blower (quiet, energy-saving, and long-life).
- An alarm output can also be set at the desired cleanliness level. (The alarm output consists of three types: an LED indicator, a buzzer, and an open collector output.)
- Existing LANs with Ethernet capability can be used to monitor and collect detection data.

## Ventilation inlet

Outside air enters through a ventilation inlet, and particles are detected by an internally installed sensor.

## Level display

Red LED lights continuously display the current cleanliness level.



Front of the body

## Mounting hole ①

Mountable from the front using M4 screws.

## Right side of the body

### Rotary switch

Sets the alarm output level.



## Alarm display lamp

Red light comes on when the preset level is exceeded.

## Rear of the body

### Alarm output terminal

When an alarm output is issued, the open collector output appears. Can be used as an external warning buzzer or a display lamp.

### Cable fixing slot

The cable used to connect to the alarm output terminal can be fixed in place with a tie band.



## Mounting hole ②

Mountable using the hook mounting method.

## Mounting hole ③

Mountable from the back using M4 tapping screws. In addition, a DIN rail mounting plate available on the market can be mounted in these mounting holes for attaching a DIN rail.

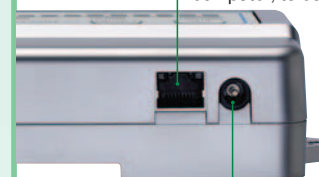
※For details, see the Owner's Manual provided with the product.



## Bottom of the body

### LAN terminal

LAN cable can be used to connect to a network hub or a personal computer, to collect data.



### Power supply jack

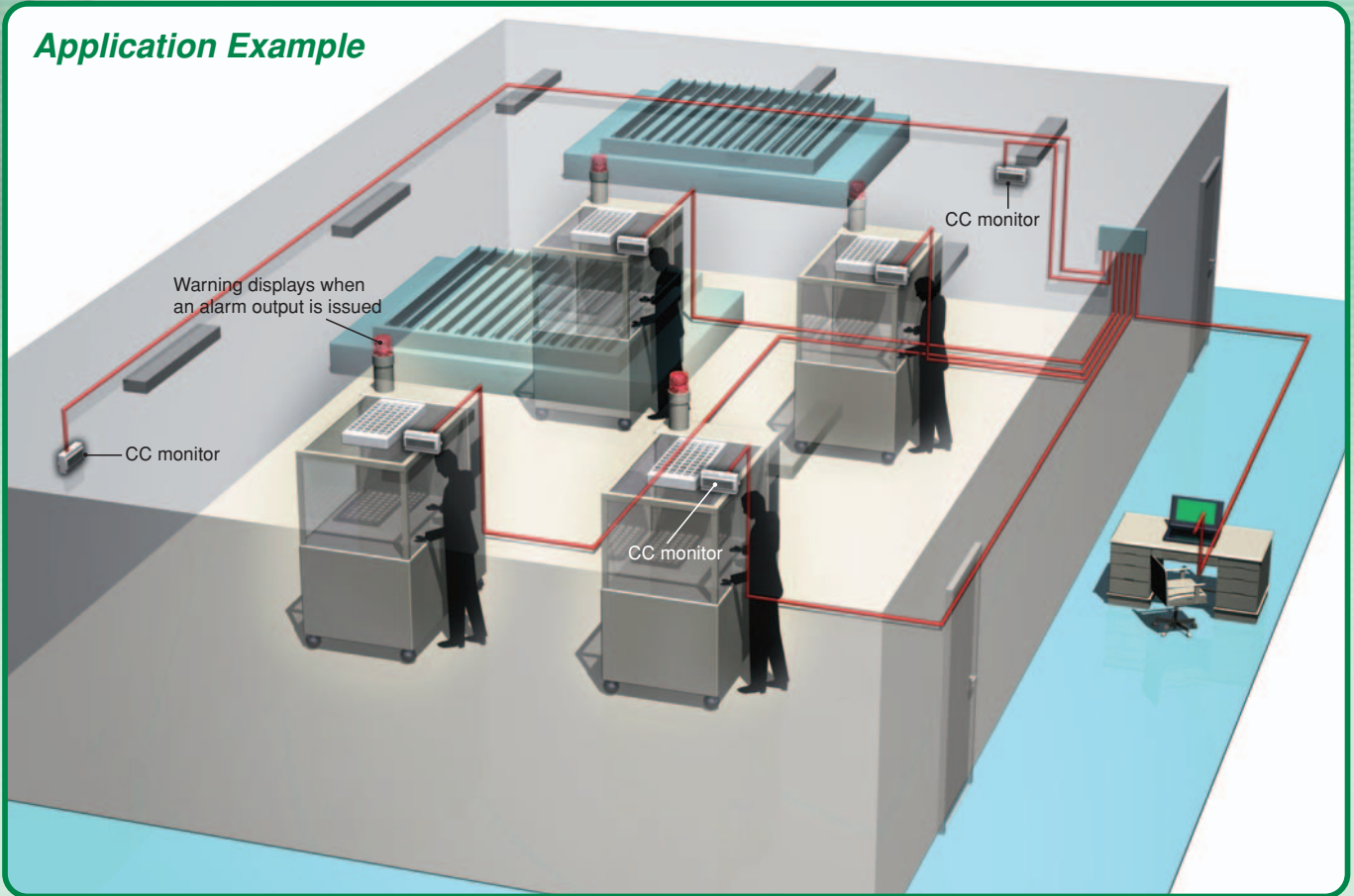
Connects to a dedicated AC adaptor.



## Caution

Before use, always read the Safety Precautions in the Owner's Manual.

### Application Example



### Order Codes

#### ● CC monitor

DTY-CMH-01



Ferrite core (accessory)

※ Used when wiring an alarm output.

Dedicated AC adaptor (accessory)

Rating

Input: 100VAC thru 240VAC

50/60Hz 0.6A

Output: 12VDC 1.5A

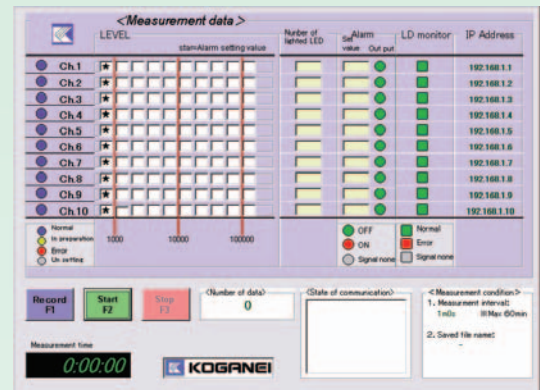
#### ● Option

Dedicated AC adaptor

DTY-CMA-PS01

An AC adaptor provided with the CC monitor  
(For maintenance)

#### ● Support software (free)



Download the software from the Koganei website.

Major features

- Up to 10 CC monitors can be centrally controlled.
- Equipped LD monitor function showing the service life of detector laser.

(Compatible OS: Windows NT, 2000, and XP)

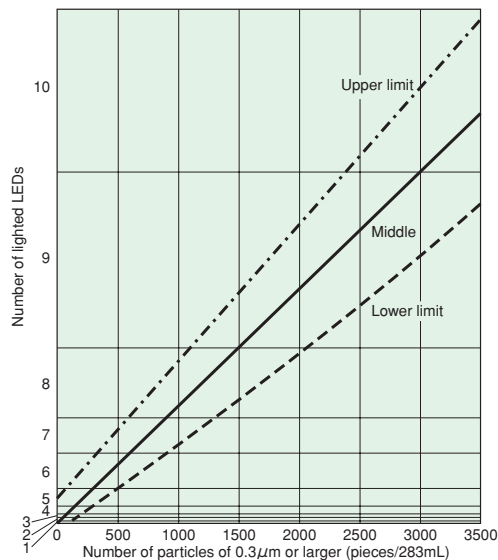
※ Windows is the registered trademark of Microsoft Corporation.

## Specifications

Item	Model	DTY-CMH-01
Measurement range		Equivalent of ISO class 5 to ISO class 8
Measurement method		Light scattering method
Detectable particle size		0.3 $\mu$ m or larger
Display method		LED display of cleanliness levels set by Koganei
Display level <sup>Note</sup>		10-stage level display from LEVEL 100 to LEVEL 100,000 100, 1,000, 2,000, 3,000, 5,000 10,000, 20,000, 30,000, 50,000, 100,000
Sampling method		Uses rising airflow from a built-in heater
Sampling time		5 minutes
Measurement result update time		5 seconds
Alarm output		LED indicator
		Buzzer
		Open collector (24VDC 50mA.max.)
Communication function		Ethernet $\times$ 1 port
Mounting direction		Vertical (Within $\pm 3^\circ$ )
Power supply		12VDC $\pm 10\%$ 10W (Always use the dedicated AC adaptor.)
Operating temperature range		0 $\sim$ 40 $^\circ$ [32 $\sim$ 104 $^\circ$ F]
Operating humidity range		30 $\sim$ 80%RH
Mass		Approx. 400g [14.11oz.]
Accessories		AC adaptor, ferrite core

Note: For details about the display level, see "Output Characteristics" and "Guide for Number of Lighted LEDs and Cleanliness Level."

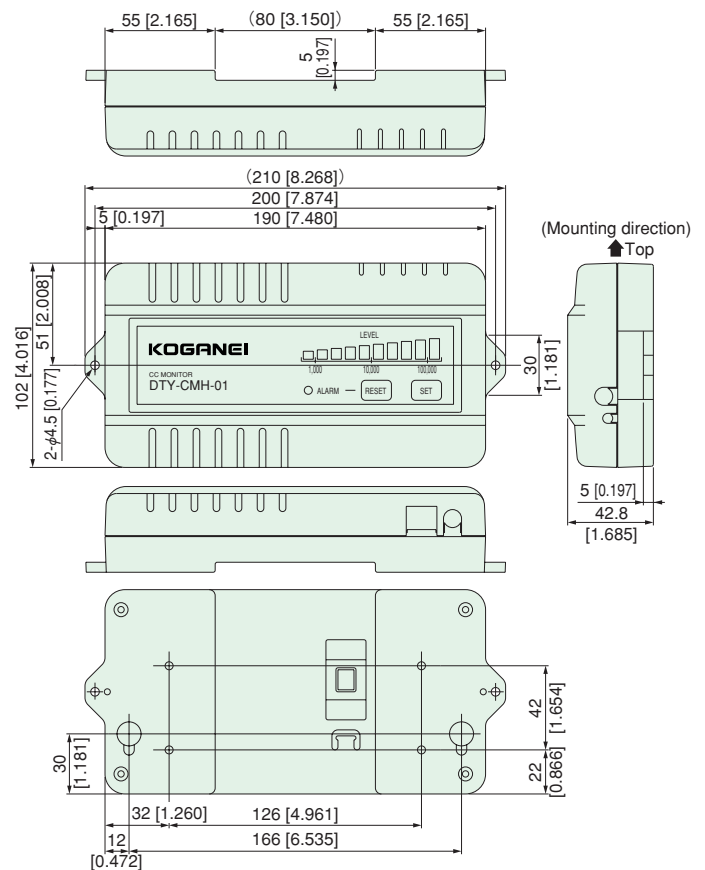
## Output Characteristics



## Handling Instructions and Precautions

- The cleanliness levels were independently determined by Koganei, with reference to FED STD209D.
- This product is an environmental monitor providing a simplified display in stages of cleanliness level equivalent values, and is not a measuring instrument. For checking the ISO and JIS cleanliness class and for measurement of cleanliness to the required high accuracy, use a separate particle counter or other measuring instrument.
- Since this product is not a measuring instrument, it does not require calibration. However, Koganei will perform inspections and adjustments at customer request. Customers who want the service should consult with Koganei.
- Always mount this product vertically, with the top and bottom orientations maintained. If mounted in any other direction, it cannot detect floating particles. As non-standard mountings could also result in breakdowns, always mount in the specified direction.
- Avoid placement, use, or storage in any of the following locations or environments.
  - Locations where the ambient temperature exceeds the range of 0 to +40 $^\circ$ C [32 to 104 $^\circ$ F].
  - Locations subject to direct sunlight.
  - Locations subject to water, oil, chemicals, or steam.
  - Locations with sudden temperature changes that lead to condensation.
  - Locations with inductive interference, or where static electricity, magnetism, or noise commonly occur.
  - Locations directly in the path of air blowing from air conditioners.
- Before use, always read the Safety Precautions in the Owner's Manual provided with the product.
  - Locations where vibrations or shocks can be transmitted directly to the body.
  - Locations where the ambient humidity is 90% or higher.
  - Locations where radiant heat, etc., results in heat accumulation.
  - Locations with large quantities of dust, salts, or metal powder, etc.
  - Locations subject to corrosive gases or flammable gases.

## Dimensions mm [in.]



## Guide for Number of Lighted LEDs and Cleanliness Level

Number of lighted LEDs (red)	Cleanliness level	ISO class equivalent value (reference)
0	100	5
1	1,000	6
2	2,000	
3	3,000	
4	5,000	
5	10,000	7
6	20,000	
7	30,000	
8	50,000	
9	100,000	8
10	Over 100,000	Over 8



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