



Digital Controller  
**MESTAR<sup>+</sup>**  
■ pH/ORP ■ RC ■ DO ■ EC



Precise and delicate managements are required to keep pure and sanitary water.



Mestar+ can measure the value of pH, ORP, Chlorine, Dissolved Oxygen and Electrical Conductivity.



It is applicable in a variety of industrial site such as sewage treatment plant and power plant.

- Simple Calibration and Highly Reliable Digital Type Controller.
- Easy installation with DIN(96\*96mm) Standard Size Case and High Legibility by 3inch Segment Display.
- Figure Out the Causes of Error Through Self-Diagnostic Function by Data Back-Up.



# pH/ORP

## Digital pH/ORP Controller

### Model Code

MESTAR<sup>+</sup> - <sup>①</sup>P <sup>②</sup> <sup>③</sup> - <sup>④</sup>

**① Controller**

P : pH/ORP

**② Controller Option**

B : Standard

T : Temp. Compensation

C : Communication (RS-485)

X : Communication +

Temp. Compensation

**③ Output Option**

0 : Standard

1 : Temp. (4~20mA)

**④ Electrode**

1 : GS-5

6 : CPP11

2 : GSH-5

7 : CPP12

3 : MS-5

8 : CPP13

4 : GST-5

9 : CPP14

5 : GSTH-5

### Specification

**Display**

3in. LCD Segment Display (White Back Light)

**Measuring Range**

0.00~14.00pH / -1999~1999mV / -10.0 ~ 100°C (Option)

**Resolution**

0.01pH / 1mV / 0.1°C

**Analog Output**

DC 4~20mA 2Channels - pH / ORP Meas. Value, Temp. (Option)

**Alarm Output**

HIGH, LOW Alarm (1a1b)

**Case**

Anti-static ABS

**Power**

AC85~245V, 50/60Hz, Power Consumption 3W

**Weight**

Approx. 450g



# RC

## Digital Residual Chlorine Controller

### Model Code

MESTAR<sup>+</sup> - <sup>①</sup>R <sup>②</sup> <sup>③</sup> - <sup>④</sup>

**① Controller**

R : RC

(Residual Chlorine)

**② Controller Option**

B : Standard

C : Communication (RS-485)

**③ Output Option**

0 : Standard

**④ Electrode**

1 : CPR11

### Specification

**Display**

3in. LCD Segment Display (White Back Light)

**Measuring Range**

0.00~2.00ppm

**Resolution**

0.01ppm

**Analog Output**

DC 4~20mA 1Channels- ppm Meas. Value

**Alarm Output**

HIGH, LOW Alarm (1a1b)

**Case**

Anti-static ABS

**Power**

AC85~245V, 50/60Hz, Power Consumption 3W

**Weight**

Approx. 450g

\* MESTAR<sup>+</sup> RC shows the reading of Free Residual Chlorine in a solution.



# DO

## Digital Dissolved Oxygen Controller

### Model Code

**MESTAR<sup>+</sup>** - <sup>①</sup>**D** <sup>②</sup> <sup>③</sup> - <sup>④</sup>

#### ① Controller

D : DO  
(Dissolved Oxygen)

#### ② Controller Option

B : Standard (Temp. Compensation)  
C : Communication (RS-485)

#### ③ Output Option

0 : Standard  
1 : Temp. (4~20mA)

#### ④ Electrode

1 : CPD11

### Specification

|                 |                                                       |
|-----------------|-------------------------------------------------------|
| Display         | 3in. LCD Segment Display (White Back Light)           |
| Measuring Range | 0.00~20.00mg/L / -10.0 ~ 100℃                         |
| Resolution      | 0.01mg/L / 0.1℃                                       |
| Analog Output   | DC 4~20mA 2Channels - ppm Meas. Value, Temp. (Option) |
| Alarm Output    | HIGH, LOW Alarm (1a1b)                                |
| Case            | Anti-static ABS                                       |
| Power           | AC85~245V, 50/60Hz, Power Consumption 3W              |
| Weight          | Approx. 450g                                          |



# EC

## Digital Electrical Conductivity Controller

### Model Code

**MESTAR<sup>+</sup>** - <sup>①</sup>**E** <sup>②</sup> <sup>③</sup> - <sup>④</sup>

#### ① Controller

E : EC  
(Electrical Conductivity)

#### ② Controller Option

B : Standard (Temp. Compensation)  
C : Communication (RS-485)

#### ③ Output Option

0 : Standard  
1 : Temp. (4~20mA)

#### ④ Electrode

1 : CPE11  
2 : CPE12

### Specification

|                 |                                                      |
|-----------------|------------------------------------------------------|
| Display         | 3in. LCD Segment Display (White Back Light)          |
| Measuring Range | 0.00 ~ 10.00mS/cm                                    |
| Resolution      | 0.01mS/cm                                            |
| Analog Output   | DC 4~20mA 2Channels - EC Meas. Value, Temp. (Option) |
| Alarm Output    | HIGH, LOW Alarm (1a1b)                               |
| Case            | Anti-static ABS                                      |
| Power           | AC85~245V, 50/60Hz, Power Consumption 3W             |
| Weight          | Approx. 450g                                         |



# Electrodes



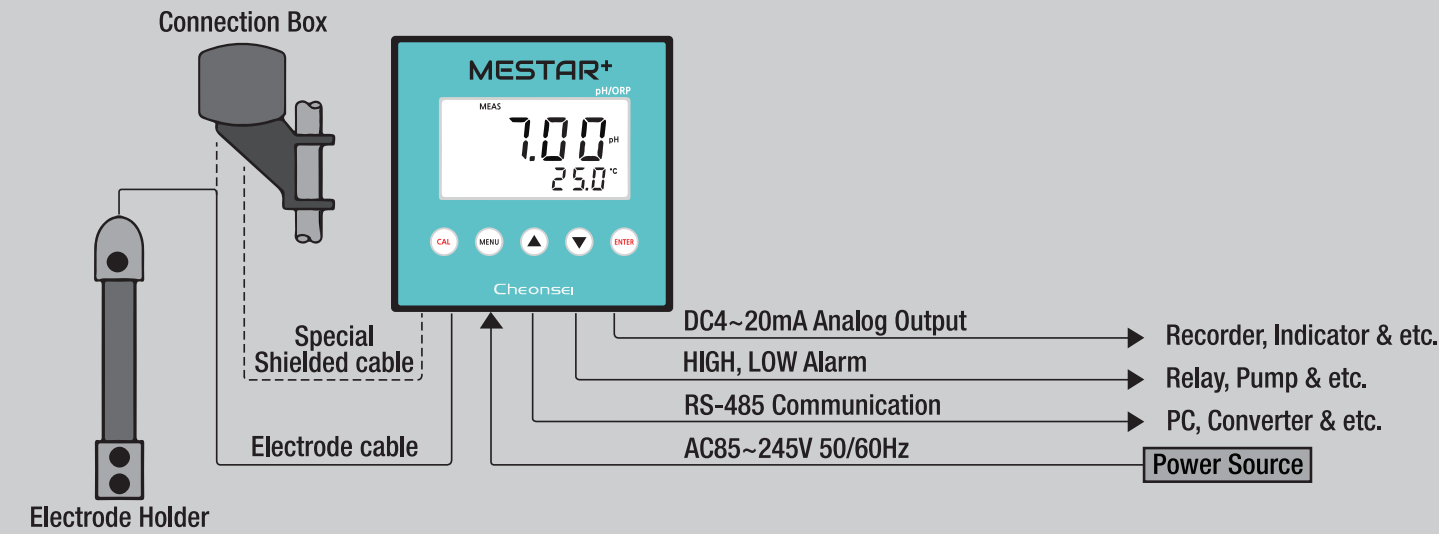
## Electrode Specification

| Controller | Model  | Temp. Compensation | Operating Temperature | Material | Supplement      | Method of Measurement | Internal Liquid | Cable Length |
|------------|--------|--------------------|-----------------------|----------|-----------------|-----------------------|-----------------|--------------|
| pH         | GS-5   | X                  | 0~40℃                 | Glass    | Required        | Glass Sensor          | 3.3mol KCl      | 5m           |
|            | GSH-5  | X                  | 0~80℃                 |          |                 |                       |                 |              |
|            | GST-5  | O                  | 0~40℃                 |          |                 |                       |                 |              |
|            | GSTH-5 | O                  | 0~80℃                 |          |                 |                       |                 |              |
|            | CPP11  | X                  | 0~80℃                 | PC       | Supplement free |                       |                 |              |
|            | CPP12  | O                  | 0~80℃                 |          |                 |                       |                 |              |
|            | CPP13  | O                  | 0~80℃                 | Glass    |                 |                       |                 |              |
|            | CPP14  | X                  | 0~80℃                 | PC       |                 |                       |                 |              |
| ORP        | MS-5   | X                  | 0~40℃                 | Glass    | Required        | Gold                  |                 |              |
| RC         | CPR11  | X                  | 2~45℃                 | Glass    | Supplement free | Amperometric          |                 |              |
| DO         | CPD11  | O                  | 0~50℃                 | ABS      | Required        | Galvanic              | 0.5mol NaOH     |              |
| EC         | CPE11  | O                  | 0~80℃                 | ABS      | -               | 2 Pole                | -               |              |
|            | CPE12  | O                  | 0~80℃                 | ABS      | -               | 2 Pole                | -               |              |

# System Diagram

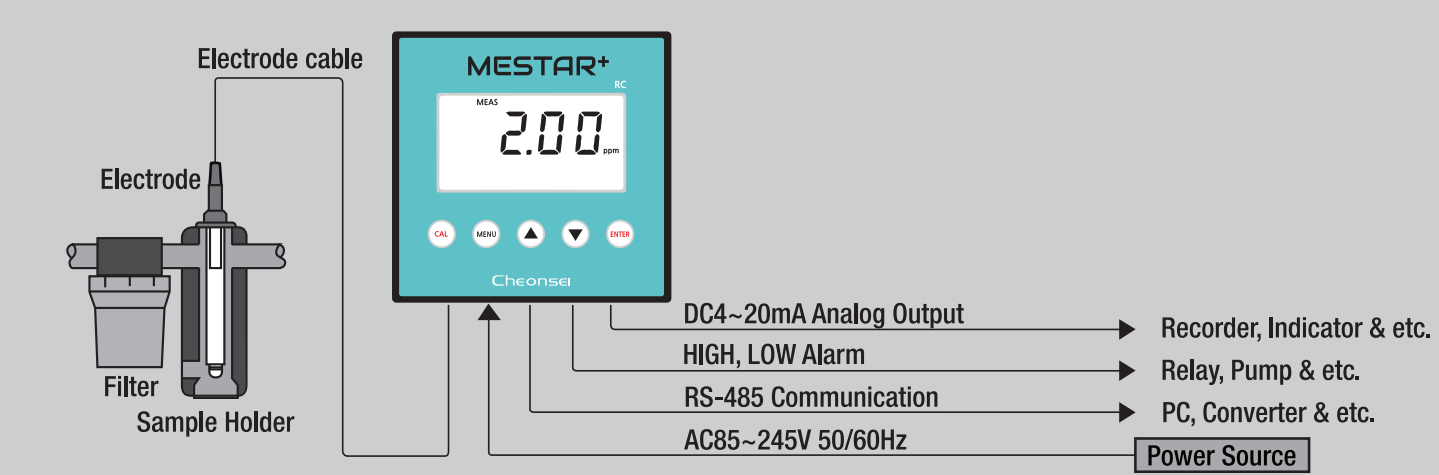
## 〈Electrode Holder Type〉

\* Applicable model : pH/ORP, DO



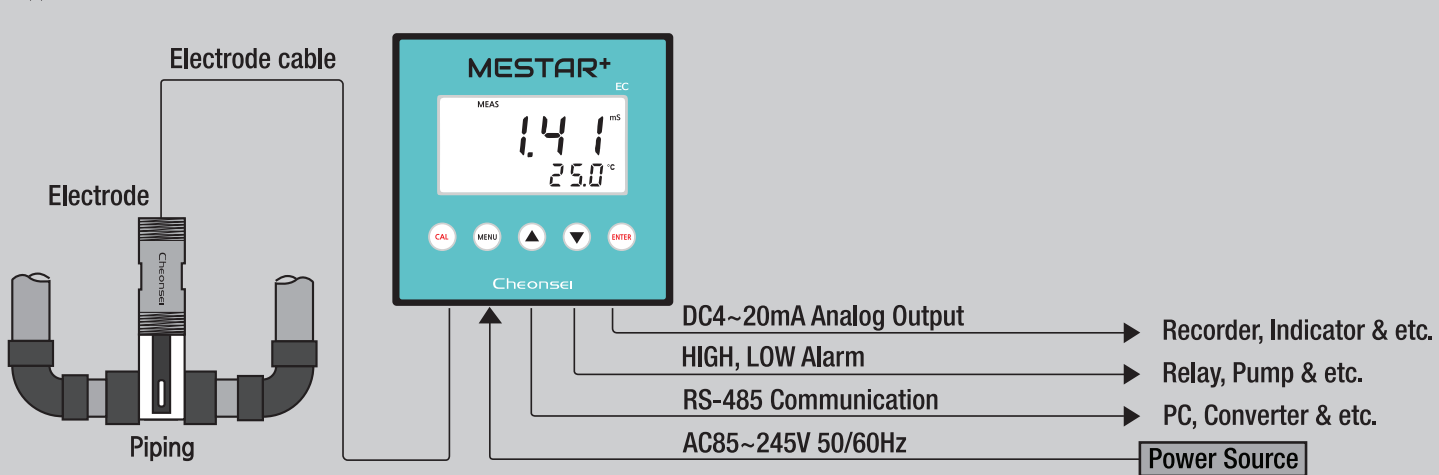
## 〈Sample Holder Type〉

\* Applicable model : pH/ORP, RC



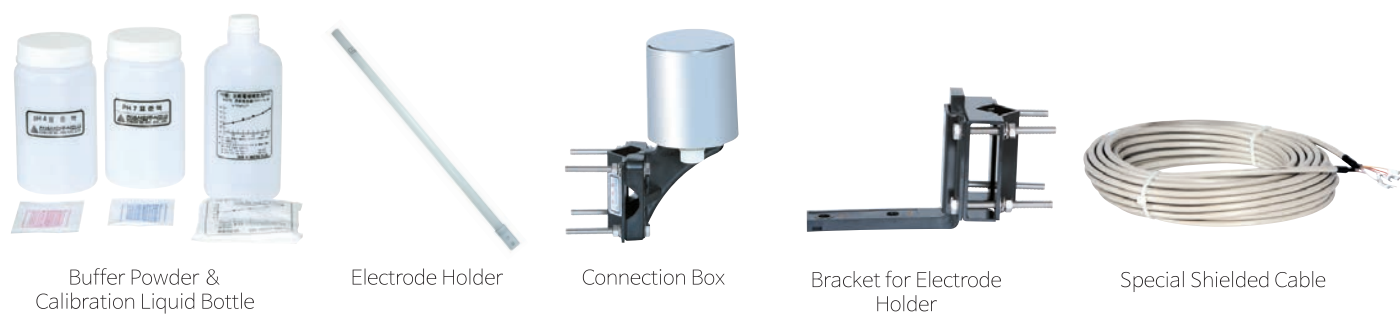
## 〈Pipe Mounting Type〉

\* Applicable model : EC



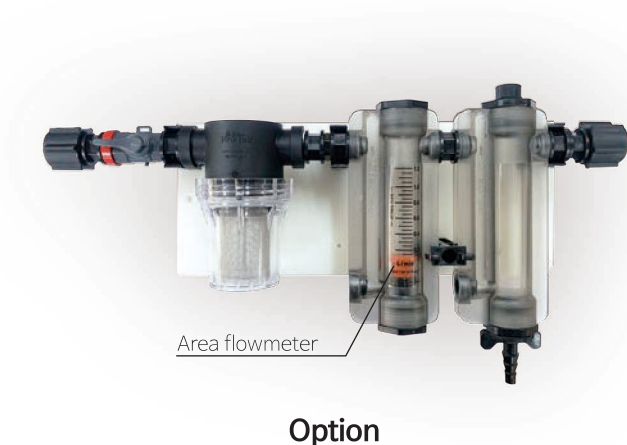
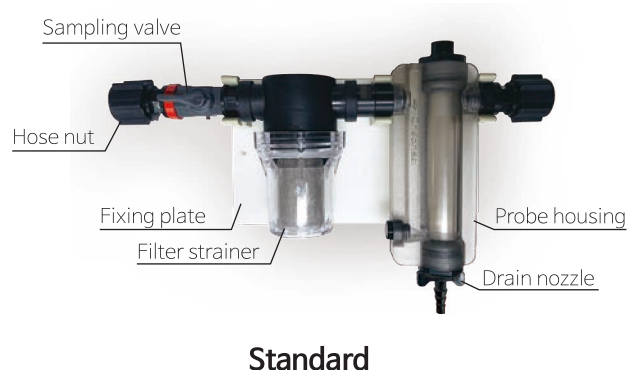
# Sets and Components

## 〈Electrode Holder Type〉



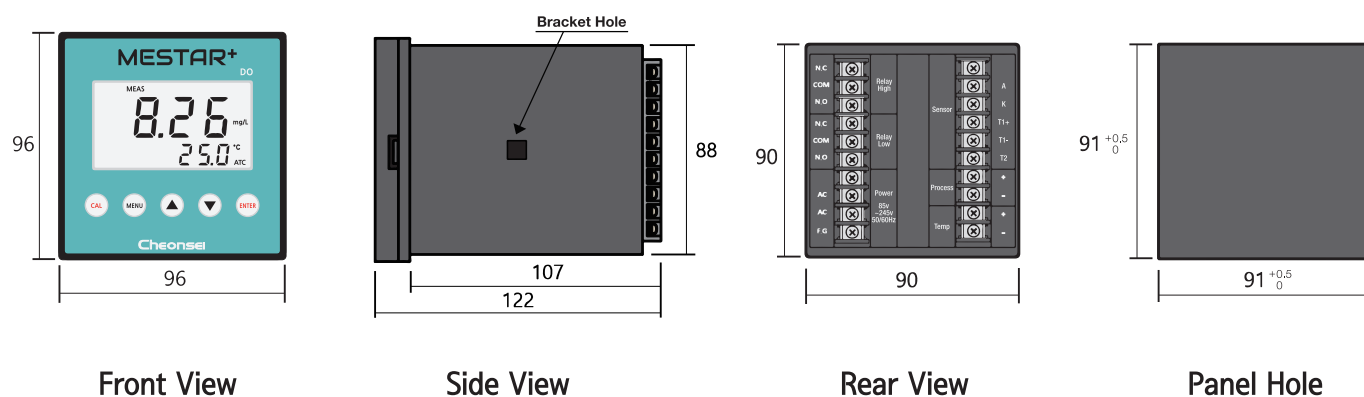
※ The standard components may vary depending on model.  
 ※ All model's specification can be revised for improvement without prior notice.

## 〈Sample Holder Type〉



※ Sample Holder can be used with a number of electrodes together by installing additional mounting.  
 ※ The hose size for Sample Holder is  $\phi 8 \times \phi 12$ .  
 ※ Please contact sales agent first before using non-standard parts.

# Dimensions



MESTAR<sup>+</sup>