

18 Conductivity Monitor

EC-502



Features

- Measurement of SI unit and old unit shifting is possible
SI unit (mS/m, S/m) and old unit (mS/cm) can be shifted and measured.
- Possible to set and change cell constant as you need.
- The electrode of screw and cap nut fixing
The flow type measuring tank for process piping is also prepared.
- Possible to measure liquid of low density and high density
- 4-range-switch transmission output 4~20 mA
- Excellent chemical-resistant type, Carbon Electrode.
- Flow type measuring tank ECD-FH
It is convenient to use this measuring tank when you fix conductivity electrode to process pipes.

Technical Information

Conductivity unit converting table

If you divide old conductivity unit ($\mu\text{S/cm}$) by 10, it becomes new unit (SI unit) of conductivity unit (mS/m).
Because of unit change, cell constant (θ) changes.
Cell constant (θ) is equal to new unit (SI unit) cell constant (m^{-1}), if you multiply old unit (cm^{-1}) by 100.

Conductivity

Old unit ($\mu\text{S/cm}$)	New unit (SI unit) mS/m
0.1	0.01
0.5	0.05
1	0.1
5	0.5
10	1
50	5
100	10
500	50
1000	100

Remarks : μ means 10^6 , m means 10^3

Example : $1000 \mu\text{S/cm} = 1\text{mS/cm} = 0.001\text{S/cm}$

$1 \mu\text{S/cm} = 100 \mu\text{S/m} = 0.1\text{mS/cm}$

Specifications

Meter

Product Name	Conductivity Monitor (for Middle/High Density)	Conductivity Monitor (for Low/Middle Density)
Model	EC-502(H)	EC-502(L)
Display	LED red 2-row Upper: EC Value Lower: Water Temp (only display)	
Measuring Range	SI unit 0~20S/m Old unit (0~200mS/cm) Temp 0~100°C (only display)	
Display Range	SI unit ①0.000~0.200S/m ②0.000~2.000S/m ③0.000~20.00S/m Old unit ①0.000~2000mS/cm ②0.00~20.00mS/cm ③0.0~200.0mS/cm	
Accuracy	within 0.5% (FS)	
Transmit output	DC4~20mA 3 range switchng	
Contact Output	High/Low Limit each a,b contact point (No voltage)	
Power supply Standard component	AC85~240V 50/60Hz Meter body, EC Electrode, Panel fixing tool	

EC Detector

Model	ECD-4CY	ECD-1CY
Cell constant	400 m^{-1} (Old unit: 4 cm^{-1})	100 m^{-1} (Old unit: 1 cm^{-1})
Principle	AC 2 Electrode System, Carbon Electrode	
Sample Temperature	0~80°C	
Material	PPS, Carbon, FKM	
Installation	Screw-in type, Flow type, Throw-in type	
Cable Length	5m Standard	