



Cond.

Res.

°C

Microprocessor  
**SUNTEX EC-410/430**  
Conductivity Monitor



*Microprocessor Conductivity Monitor*

# *EC-410*

$\mu\text{S}/\text{cm}$   
 $\text{mS}/\text{cm}$

$\text{M}\Omega\cdot\text{cm}$

4-20mA  
Output



## **ISOLATED 4-20mA OUTPUT**

*Accurate measurement and signal transmission....*

# CONTROL

## EC-430

Microprocessor Conductivity Monitor



$\mu\text{S/cm}$   
 $\text{mS/cm}$

$\text{M}\Omega\cdot\text{cm}$

4-20mA  
Output

One  
Relay

### ONE RELAY CONTROL

# Microprocessor Conductivity Monitor..EC-410/430

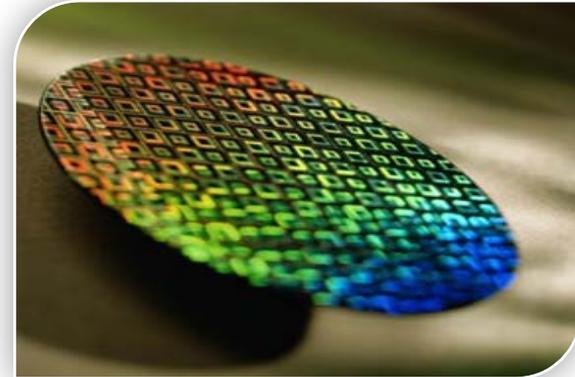
## OVERVIEW



## MAIN APPLICATIONS

### Pure Water/Process Water

- For raw water and product water of all kinds of pure water system measurement and control
- For process water cleaning confirmation or concentration measurement



Semiconductor wafer etching



Industrial process water

### Cooling Water/Recycling Water

- For cooling water and boiler feeding water to prevent scaling and corrosion in pipeline system
- For industrial process water recycling system to save resource and cost

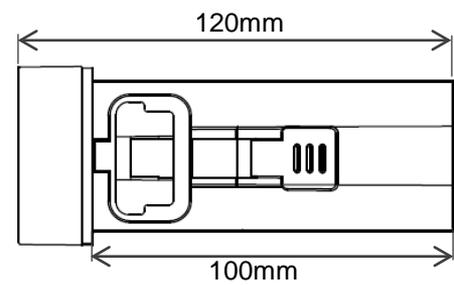
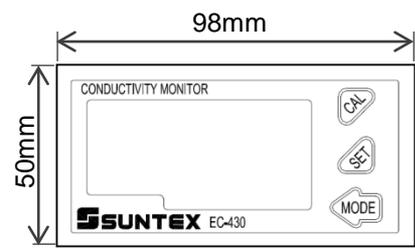
# Microprocessor Conductivity Monitor..EC-410/430

*Compact size.....*

## Easy-to-install Monitor

*.....with great popularity in field*

The EC-410/430 monitor series has a compact design to fit in the equipment machines such as pure water system control panel or semiconductor equipment in the clean room. This practical & mature model has successfully been proved by the popularity in fields.



Fabrication with machine



Compact size to save panel space

# Microprocessor Conductivity Monitor..EC-410/430



## Conductivity/Resistivity CELL



*Wide suitability for 8-24X & 8-22X series...*

*4-Electrode conductivity & 2-Electrode resistivity cells...*



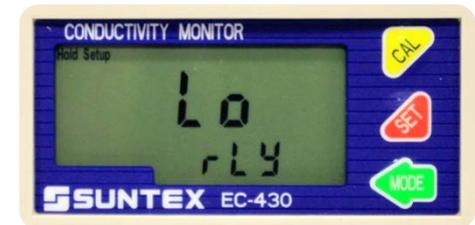
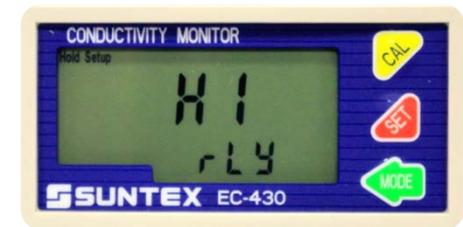
# Microprocessor Conductivity Monitor..EC-410/430

*Design for EC-430 only.....*

## Programmable Relay

*.....effectively controlling the external devices*

**Depending upon** requirements of the process, programmable set point and hysteresis ensure appropriate timing for activation of the external devices such as pumps or valves. The hysteresis(dead band) function extends set-point range to avoid frequently activating pump or solenoid valves.



Hi/Lo programmable relay contact

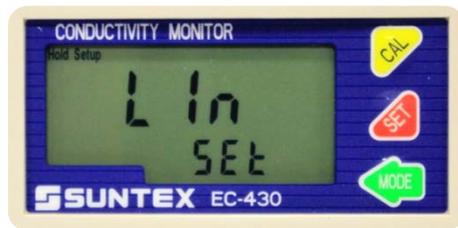
# Microprocessor Conductivity Monitor..EC-410/430

*Indispensable.....*

## Temperature Compensation

*.....measurement accuracy can be confirmed*

**Accurate measurement** is insured by auto temperature compensation with NTC30K or PT1000. Temperature measurement can be corrected within  $\pm 5.0^{\circ}\text{C}$  to eliminate errors. There are linear temperature compensation coefficient setting for different sample solution, and non-linear compensation for pure water resistivity measurement.



Coefficient: 0.00% ~ 40.00%



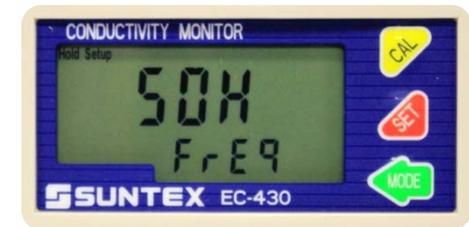
# Microprocessor Conductivity Monitor..EC-410/430

*Superior.....*

## Noise Reduction

*.....removing the noise from the signal*

**Stability** is enhanced by the noise reduction function. For convenience of usage, the EC-410/EC-430 power input is designed as 100~240VAC $\pm$  10%, 50/60Hz. This frequency setting function additionally sets the noise filter of the device and thus to reduce the electromagnetic influence of the power frequency to the signal transmission and thus enhances the measurement stability .



Frequency setting for  
advanced noise reduction

# Microprocessor Conductivity Monitor..EC-410/430

*Flexible & reversible.....*

## Analog Output

*.....for PLC communication or recorder*

An isolated 4~20mA output is equipped in both EC-410 & EC-430 . The programmable setting allows the 4mA or 20mA output corresponding to the desired value. The setting function enables the enhancement of signal resolution and also the possibility of reversed setting.



PLC model



Programmable 4~20mA  
output setting

# Microprocessor Conductivity Monitor..EC-410/430

*Quickly accessible....*

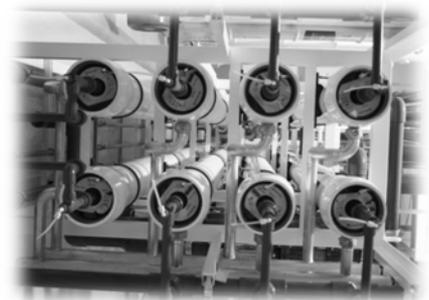
## Calibration Mode

*.....accuracy ensured by smart interface*

The **pre-set cell constant selection** helps easily attain the nearby cell constant of the sensor, and then by inputting the specific cell constant value of the sensor or by adjusting the measurement value with standard solutions or approved portable instrument value comparison, the field calibration can be done.



Adjustable cell constant



# EC-410 & EC-430

*Microprocessor Conductivity Monitor*



**SUNTEX**