

# 01

## Impedance type Sensor for Chemical Leak Detection

### Principle of Chemical Substance Detection

Chemical substances leaked by displacement of impedance values formed when a solution of chemical comes in contact between two electrodes is detected.



#### Core Technologies

- Electrode plating technology for substrate
- No peeling and corrosion of electrode
- Electrode's pattern for improved precision

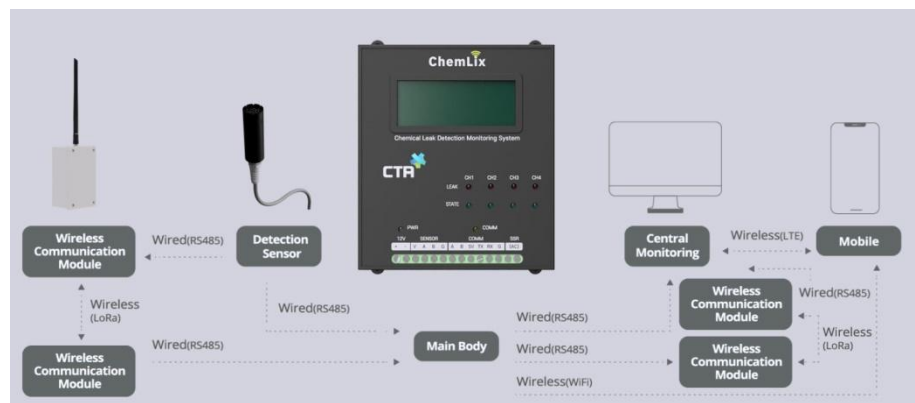
### Product Features

- ✓ Used in repetition semi-permanently, no maintenance, easy to use
- ✓ No malfunction due to lack of reactivity with water
- ✓ Can be reused immediately after washing with water
- ✓ Detect all chemicals such as acid, alkali, organic solvent, oil

### Chemical Detection Time

- ❖ **Acid Solution : 1sec**  
(HCl, H<sub>2</sub>SO<sub>4</sub>, HF, HNO<sub>3</sub>, H<sub>3</sub>PO<sub>4</sub>, H<sub>2</sub>O<sub>2</sub> etc.)
- ❖ **Alkali Solution : 1sec**  
(NaOH, KOH, NaCN, NH<sub>4</sub>OH, Na<sub>2</sub>SO<sub>3</sub> etc.)
- ❖ **Organic Solvent : 1sec**  
(Toluene, Acetone, MEK, TEC etc.)
- ❖ **Oil : 1sec**  
(Kerosene, gasoline, insulating oil, polishing oil etc.)

### Communication Concept



## 02

### Impedance type Sensor for Chemical Leak Detection

#### Specification

Model	Alarm 및 통신 Sensor	ChemLix200 ChemLixSS200
Material	Module Sensor Sensor PCB	ABS Resin PEEK Silicone Wafer
Dimension	Module Sensor	107 x 145 x 30mm Ø30 x 105m
Power	Input Module Consumption	AC220V DC5V/12V 30W
Input Signal	4Ch	Impedance
Output Signal	RS485	Warning Light Buzzer
Setting Mode	Program/WiFi	Setting/Monitoring

#### IPRs

- No. 10 - 1947239 (Medicinal Fluid leakage detection sensor)
- No. 10 - 2006469 (Monitoring device using a leakage detection sensor)
- No. 10 - 1767258 (Notification method and its system)

#### Core Competitiveness

##### High Quality

- ◆ Detection time : 1sec or less
- ◆ Acid/ Alkali/ Organic solvent/ Oil can be detected  
(All of 746kinds can be detected)
- ◆ No malfunction in water / used in repetition semi-permanently
- ◆ Simple to install / easy to use / no maintenance fee
- ◆ central monitoring available via wireless

##### RESUE

Can be reused  
semi-permanently

##### ASSURANCE

2year of quality  
assurance

##### SERVICE

Free inspection  
once per year

## 03

Impedance type  
Sensor for  
Chemical Leak  
Detection

## Mobile Use

Channel Settings				Materials Threshold			Monitoring		
CH#	Use	Don't	Materials	Materials	Threshold(MAG,ANGLE)		CH#	Value	Alarm
1	<input checked="" type="radio"/>	<input type="radio"/>	ETA	H2SO4	8000	320	1	19778 $\angle$ 9.0°	ON
2	<input checked="" type="radio"/>	<input type="radio"/>	NaOH	HCl	15000	13	2	unused	OFF
3	<input type="radio"/>	<input checked="" type="radio"/>	Kerosene	NaOH	18000	9	3	unused	OFF
4	<input type="radio"/>	<input checked="" type="radio"/>	N2H4	H2O2	4000	293	4	unused	OFF
				ETA	32767	350			
				N2H4	400	260			
				Kerosene	130	240			
				C4H8O	32767	65535			

WiFi AP → ChemLix → PW12345678 → User Page → Setting → Monitoring

- 1) Connect mobile's Wifi with ChemLix
- 2) Type [chemlix.com/info](http://chemlix.com/info) in the Internet address.
- 3) You can enter values based on your measurement at the Threshold in the Monitoring page.
- 4) Push apply button and type [chemlix.com](http://chemlix.com) in the Internet address.
- 5) Check values or alarm at the Monitoring page.

## Installation Example

