

# SynWater

WATER QUALITY MONITORING SYSTEM

SYNELIXIS<sup>\*</sup>

# SynWater

With extensive experience in the fields of information technology and automation, and through collaborations with universities and research institutes, Synelixix presents **SynWater**, its water quality monitoring system.

**SynWater** is Synelixix' innovative solution for monitoring water quality parameters.

**SynWater** supports high-accuracy sensors suitable for measuring:

- Dissolved Oxygen (DO)
- Electrical Conductivity
- pH
- Oxidation-Reduction Potential (ORP)
- Water Temperature



## SynWater v1.0

- Supports up to 5 sensors
- Features one input port (RJ11)
- Each sensor has its own dedicated excitation power supply, ensuring that only one sensor is active at a time
- The maximum power consumption of the **SynWater** device is equal to that of its most power-demanding sensor
- Low power consumption
- The sensors' digital communication channels are electrically isolated from one another
- User-friendly sensor calibration process



# Sensor Specifications

| Sensor Type                         | Maximum Depth (m) | Calibration Interval (years) | Service Life (years) |
|-------------------------------------|-------------------|------------------------------|----------------------|
| pH                                  | 70                | 1                            | 4                    |
| Dissolved Oxygen (DO)               | 212               | 1                            | 4                    |
| Oxidation-Reduction Potential (ORP) | 70                | 1                            | 4                    |
| Electrical Conductivity (EC)        | 200               | 10                           | 10                   |
| Temperature (RTD)                   | 200               | 15                           | 15                   |

**Note:**

- **SynWater** sensors can be installed in both fresh and salt water.
- The PCB boards are waterproofed, and the input ports are electrically insulated.

## How SynWater works?

- Installation of water quality sensors on the **SynWater** ports.
- Connection of **SynWater** to a **SynField** X3 / X5 station.
- Installation of additional water network sensors and solenoid valves on the SynField X3 / X5 station.
- **Collection of measurements** from all sensors and transmission to the SynField web platform.
- **Remote water quality monitoring** via the SynField platform and/or your mobile device.
- **Remote control of automation equipment** via the SynField platform and/or your mobile device.
- Receive **user-defined alerts and notifications**, e.g. for low dissolved oxygen levels.



Remote Monitoring  
Remote Control



5 Water Quality Sensors

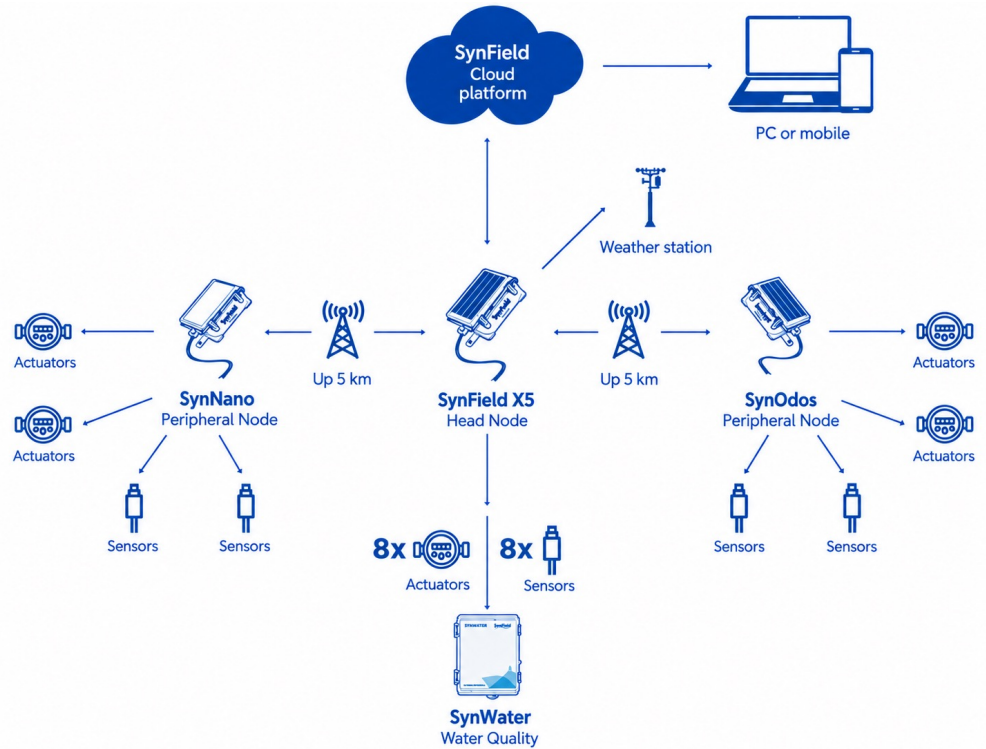


Integration with Water  
Pressure, Water Level, and  
Flow Measurements



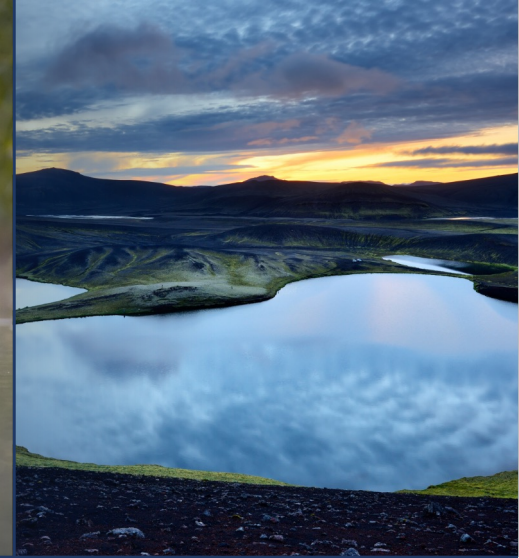
Energy Autonomy  
Low Power Consumption

# SynField Digital Ecosystem



# Typical Use Cases

- ❖ Aquaculture
- ❖ Fish Farming
- ❖ Urban Applications
- ❖ Environmental Applications
- ❖ Industrial Applications





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