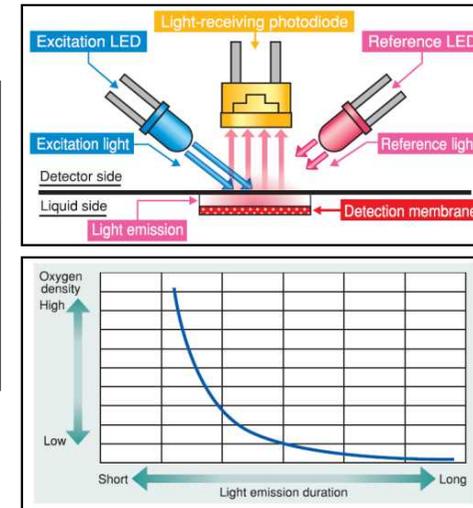




# Instrumentations in water and sewerage facilities

JFE Advantech Co.,Ltd.

## • Reliability and extensive experience in water and sewerage facilities



### Features

- Submerged level detectors
  - Robust structure. The robust structure offers high shock resistance.
  - Excellent lightning and noise protection  
Built-in lightning arresters. These features provide enhanced protection against lightning-induced voltage and noise.
  - Superior resistance to sludge and floating objects  
Since the detector is installed underwater, it is not affected by surface water conditions

- Optical DO meters
  - Our optical DO meters is used for measurements of the dissolved oxygen in the aeration tank such as sewage treatment plants .
  - Optical sensor is used, so it is excellent in stability and the response.

### Overview (Technical principles, actions, etc.)

- Submerged level detectors
  - Our submerged level detectors measure water depth by detecting water pressure.
  - These detectors can serve for monitoring water levels, and automatic control of pumps and gates.

- Optical DO meters
  - The detection membrane is emit fluorescence by the excitation light. Fluorescence state is depending on concentration of oxygen around the sensing membrane.
  - The lower the oxygen concentration, the longer the fluorescence time. In a contrasting situation fluorescence time is shorter. Thus the fluorescence time correlate to the oxygen concentration.

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## Performance /specifications of technology / product

### •Submerged Level Detectors

Sensor employs a differential transformer  
High precision, Long-term stable

Measuring Range	0~0.8m to 0~40m
Accuracy	±0.2% of span
Operating temperature range	±0.015%/°C of span
Output signal	DC4~20mA

### •Optical DO meters

Measuring range

Dissolved oxygen concentration : 0.00~20.00mg/l

O<sub>2</sub> Saturation : 0.0~200.0%

Water temperature : 0.0~50.0°C

Accuracy ±2%F.S.

Repeatability ±0.5%F.S.

90% response time at 25°C <30sec

Output signal DC4~20mA

## Usage examples / result

- In water and sewerage facilities in Japan, and has been introduced about 50,000 more units.

