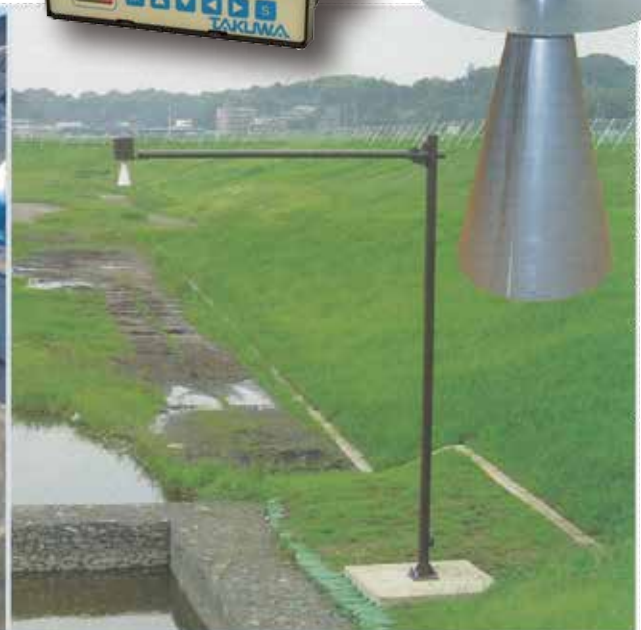


MIR-1

# Microwave type Water Level Gauge

- *Non-contact Measurement and Impervious to Driftwood and Sediment*
- *Accuracy is not Affected by Water and Ambient Temperature, Strong Wind*
- *Easy Installation and Maintenance*



## Summary

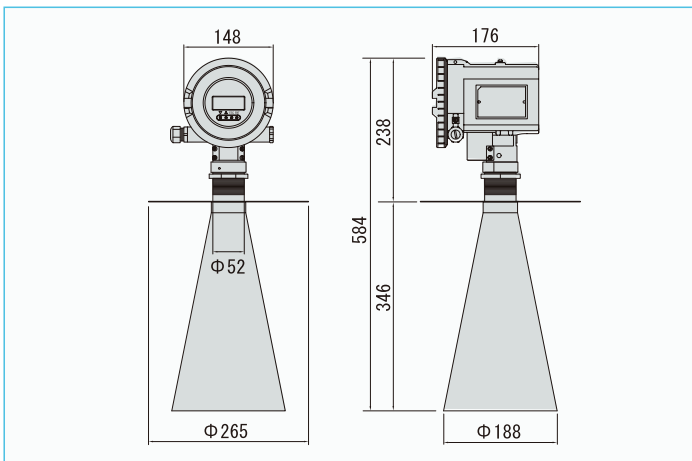
MIR-1 is a microwave water level gauge that determines water level based on the pulse propagation time. As this equipment uses microwave, it is not influenced by environmental conditions such as temperature, and can provide a stable measurement in rivers, etc.

## Principle

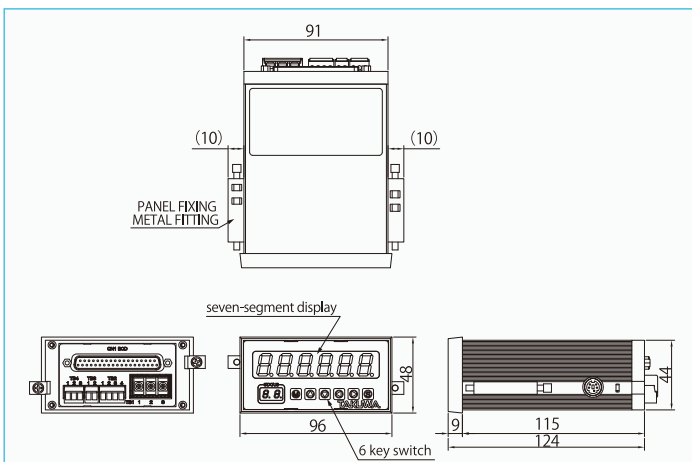
It measures the propagation time of microwave pulse that is emitted toward the water surface. It is reflected and return to the sensor. Then it computes the distance between LSRM-1 and water surface by multiplying the microwave speed by 1/2 of the propagation time. The water level is determined by deducting it from the distance between MIR-1 and the riverbed that is already-known.

## Outline drawing

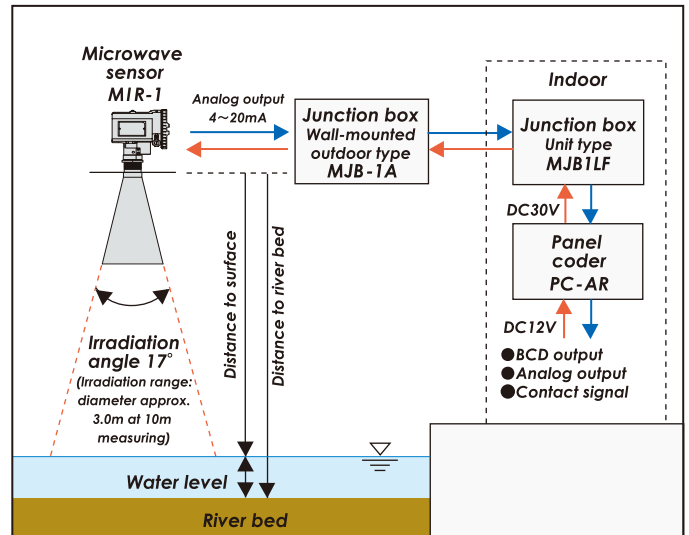
### ● Microwave sensor



### ● Panel coder



## System block diagram



## Specifications

### ● Microwave sensor

- Model : MIR-1
- Measuring method : Microwave pulse radar system
- Microwave frequency : 5.8GHz
- Band frequency :  $\pm 0.5$ GHz
- Microwave output power : Weak microwave device (Performance certificate acquired)
- Analog output signal : DC4-20mA with HART protocol signal (35  $\mu$ V/m or less at 3m distance)
- Antenna : 8B corn antenna
- Measuring range : 0-10m (for river), 0-20m (for still-water level) including dead band
- Dead band : within 0.5m below mounting position of flange
- Measuring accuracy :  $\pm 10$ mm (over 0.5m below mounting position of flange)
- Resolution : 1mm (display)
- Power supply : DC16-36V (double wire system)
- Consumption current : Max. 22mA
- Operating temperature range : -20°C-+70°C
- Material : Body: Aluminium die casting  
Antenna: SUS316
- Dimension : W265 x D265 x H584mm
- Weight : Approx. 4.2kg

### ● Panel coder

- Model : PC- AR- □□□ (□ : depend on number of Input, type and number of output signal)
- Input : 4-20mA
- Output : Standard : Contact signal (when threshold over)  
Option : 4-20mA, BCD
- Functions : Data display, Scale conversion, Level offset, Averaging
- Power source : DC12V or AC90-220V
- Dimensions : 96W x 48H x 124D mm
- Weight : approx. 0.5g

※Information in this document is subject to change without notice