

Radar Level Gauge Application Report 30

- Level Measurement near Spillway Gate -



The KRG-10 radar level gauge features accurate, non-contact, level measurement with simple installation over a target fluid.

At this particular site, the KRG-10 radar gauge provides Dam water level measurement with a metallic arm from lake side. To determine when release the water, highly accurate measurement is required. KRG-10 realizes the accuracy $\pm 2\text{mm}$ with measuring range as 0 to 30m. So that KRG-10 is appropriate for an application like this.

Other popular measurement methods include ultrasonic level gauges are also frequently employed as a non-contact means of level measurement. This type of gauge measures the round-trip transiting time of high frequency sounds to and from the surface of a fluid and converts this into distance. Ultrasonic level gauges however are easily affected by dust, fog, vapor, pressure, temperature changes, and other environmental factors.

Radar level gauges, which incorporate electromagnetic waves (microwaves) on the other hand, do not require direct contact with Fluid, density parameters or complex capacitance comparisons. Microwave-based level gauges are also least affected by ambient conditions.

In addition, the KRG-10 radar level gauge offers HART 2-wire loop communication protocol so customers can change any parameter from a central computer station with PC and configuration software. The KRG-10's 4-key input menu display also allows parameter setting on site as an alternate method.

	KRG-10	Pressure	Capacitance	Ultrasonic
Non- Contact	○	×	×	○
Vapor / Dust (High Temp & High Humidity)	○ Least affected	○ Not affected	×	×
Temp. Change	○ Least affected	○ Not affected	○ Not affected	×
Sediment	○ Not affected	×	○ Not affected	○ Not affected
Durability	○ Isolated from tank ATM.	×	×	×
		Wet	Wet	Exposed to tank ATM.

[Application Data]

Typical User : Hydropower company
 Target : Dam water
 Location : Indonesia

[Installation Data]

Main Unit : Radar Level Gauge KRG-10
 Antenna : 4inch Cone antenna
 Range : 20m

For more detailed information, please contact your local representative.

Representative in your Area