CONTINUOUS LEVEL MEASUREMENT

Ultrasonic & Guided Wave Radar

Kryohm's mains-powered solution brings continuous, real-time level monitoring to tanks and large storage vessels holding liquids or solids. Choose non-invasive ultrasonic to retrofit tanks already in service, or guided wave radar for the highest accuracy on new builds. Both report live to the Kryohm Cloud.

Kryohm level measurement on a bulk storage tank

THE KRYOHM SOLUTION

AC mains powered Built for continuous duty	**Battery backup** Rides through power outages	**GPRS & 4G-LTE** Telemetry from the safe area
Cloud dashboards Live data, logs & alerts	**Hazardous-area rated** Ex device, IS barrier protected	**Any tank or vessel** Liquids or solids

TWO MEASUREMENT TECHNOLOGIES

NON-INVASIVE

Ultrasonic

A clamp-on sensor measures level through the tank wall from the outside. Nothing enters the tank, so it retrofits to vessels already in service with no drilling and no downtime.

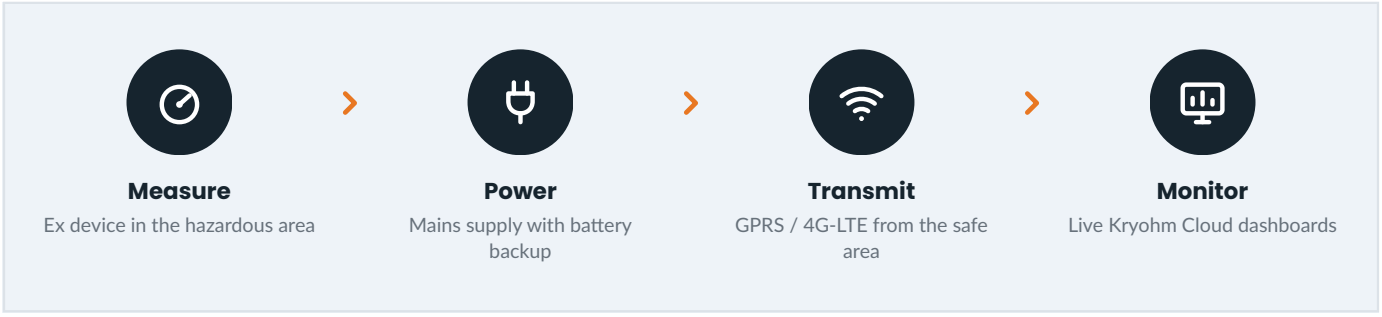
IN-TANK

Guided Wave Radar

A probe inside the tank guides the radar signal to the surface for pinpoint accuracy, even through foam or vapour. Best specified and fitted while a tank is being built.

How It Works

Whichever technology you choose, the Kryohm architecture is the same. The measurement device sits in the hazardous area and connects through an intrinsic-safety barrier to a mains-powered telemetry unit in the safe area. A backup battery keeps the system running during power outages, and readings are sent over GPRS or 4G-LTE to the Kryohm Cloud for live dashboards, trends and alerts.



Choosing Your Technology

	Ultrasonic	Guided Wave Radar
Measurement principle	Ultrasonic time-of-flight	Guided radar time-of-flight
Sensor installation	Clamp-on, outside the tank	Probe inside the tank, top-mounted
Tank entry required	None, fully non-invasive	Yes, a wetted probe
Best suited to	Retrofitting tanks already in service	New tanks, specified before commissioning
Media handled	Liquids	Liquids, pastes, slurries & solids
Measuring range	Up to 20 m	Up to 45 m with a rope probe
Accuracy	±0.1% of full scale	±2 mm (rod & coaxial probe)
Operating temperature	Ambient −40°C to +80°C	Process −50°C to +200°C
Installation downtime	None, tank stays in service	During tank commissioning

Applications

Bulk fuel & LPG storage

Chemical & petrochemical

Process & water tanks

Silos & bulk solids