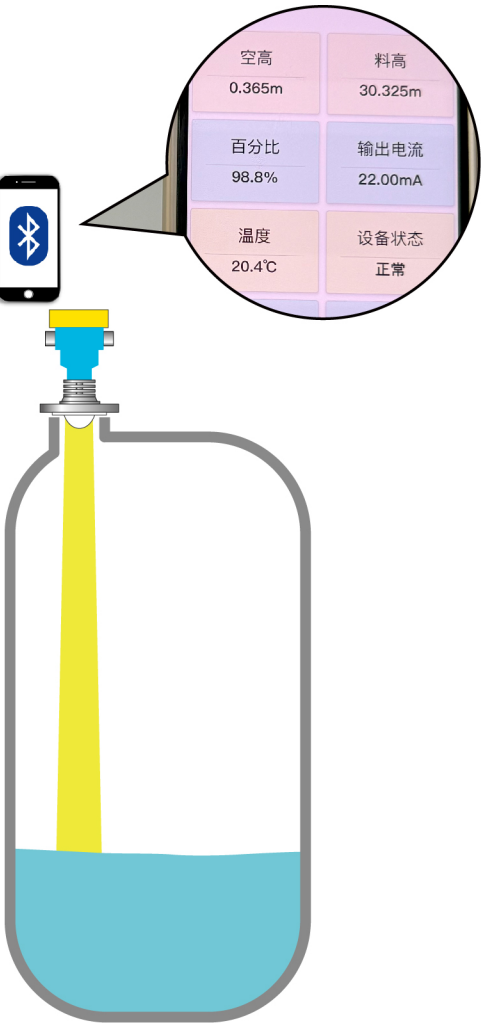


Radar Level Meter

Liquid | Solid | Bluetooth | 80GHz



JWrada® Radar Level Meter

Overview

The JWrada® series radar level meters utilize 80GHz FMCW technology, offering a measuring range of up to 150 meters. With a narrow beam angle and focused energy, they are ideal for low dielectric constant and complex media. Each unit undergoes over 50 rigorous factory tests and is well-suited for harsh conditions such as high temperature, high pressure, steam, and dust.

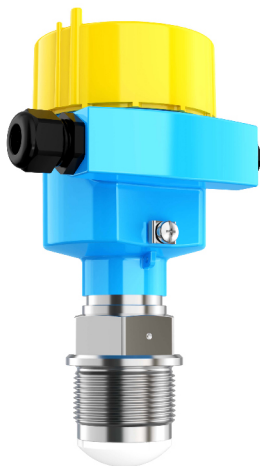
Principle

Radar level meters send microwave signals from above to the material surface. The signal bounces back, and the device calculates the distance to measure the level. This method works for both liquids and solids.

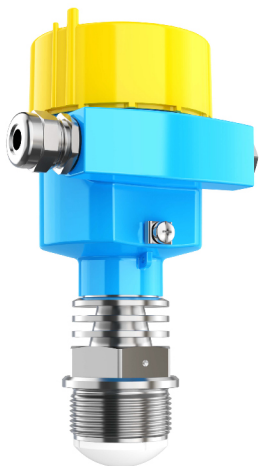
Benefits

- **Non-contact Measurement:** High-precision radar technology with accuracy up to ± 1 mm, ensuring reliable results without physical contact.
- **Excellent Environmental Adaptability:** Measurement remains stable regardless of medium properties or process conditions.
- **User-Friendly Design:** Easy setup with support for remote commissioning via the “Jiwei Smart Control” Bluetooth app.
- **Self-Developed Intelligent Echo Technology:** Proprietary echo-learning algorithm that intelligently adapts to complex environments for optimized accuracy.

JWrada-31



JWrada-32



Features	60m range, Economical 80 GHz high-frequency radar level meter with high versatility	60m range, 80 GHz high-frequency radar for liquid/solid levels, full explosion-proof
Applications	Pharmaceutical, food, energy, and hydrology & water utilities level measurement	For all zones, high-dielectric powders/solids
Measurement Medium	Liquid	Solids and liquids
Process Temperature	Ambient temperature: -40 ~ 150°C	Ambient temperature: -40 ~ 150°C High temperature: -40 ~ 220°C
Range	≤60m	
Process Pressure	-0.1 ~ 2.5MPa	
Antenna	PFA、316L+PTFE、316L+PFA	
Process Connection	Thread, flange, bracket, hanger	
Beam Angle	≥3°	
Frequency	80GHz	
Power supply	12~30V DC	
Signal Output	Two-wire: 4 ~ 20mA/HART Four-wire: RS485/Modbus Bluetooth: Support Bluetooth® v5.4	
Qualifications & Certifications	●Explosion Protection: None (for non-explosion-proof areas) ●Ingress Protection: IP66/67、IP68	● Explosion Protection: Ex db IIC T1...T6 Gb (Gas explosion-proof) Ex ia IIC T1...T6 Ga (Gas intrinsically safe) Ex tb IIIC T80°C Db (Dust explosion-proof) Ex ia IIIC T200 80°C Da (Dust intrinsically safe) ● Ingress Protection: IP66/67、IP68

	JWrada-34	JWrada-35
		
Features	120m range, 80 GHz high-frequency radar for liquid & solid level, fully explosion-proof certified	150m range, 80 GHz high-frequency radar for high temp, high pressure, corrosion resistance
Applications	Level measurement in steam, foam; low-medium dielectric powders and solids in steam	Level measurement in high temp, pressure, corrosion, steam, foam; powders, solids, dust in steam environments
Measurement Medium	Solids and liquids	
Process Temperature	Ambient temperature: -40 ~ 150℃ High temperature: -40 ~ 220℃	
Range	≤120m	≤150m
Process Pressure	-0.1 ~ 4.0MPa	
Antenna	PFA, 316L+PTFE, 316L+PFA	
Process Connection	Flange, bracket, hanger	
Beam Angle	≥3°	
Frequency	80GHz	
Power supply	12~30V DC	
Signal Output	Two-wire: 4 ~ 20mA/HART Four-wire: RS485/Modbus Bluetooth: Support Bluetooth® v5.4	
Qualifications & Certifications	● Explosion Protection: - Ex db IIC T1...T6 Gb (Gas explosion-proof) - Ex ia IIC T1...T6 Ga (Gas intrinsically safe) - Ex tb IIIC T80℃ Db (Dust explosion-proof) - Ex ia IIIC T200 80℃ Da (Dust intrinsically safe) ● Ingress Protection: IP66/67、IP68	