# Wireless 26GHz Lens Radar Level Sensor

**SKU: WS433-RD26L**

**Doc No**: WS433-RD26L-DS-EN-10





## Introduction

WS433-RD26L is K-band radar level sensor with special lens for Solid or Liquid measurement. With special lens design, it will be not affected by coagulation/hanging/operating medium/sediment and dust. It can measure up to 70m range with small beam angle 8 degree. The wireless portion is Sub-GHz technology from Texas Instruments allows long range transmission at ultra-low power consumption. It will connect 2-way wirelessly to the wireless co-ordinator WS433-CL to send data and receiving the configuration. It can be configured the operation parameters like data sending interval, health check cycle...remotely from Globiots platform or via ModbusRTU software (thru the WS433-CL). Its default data rate is 50 kbps, can be switched to 625 bps to increase the communication range. The complete set of wireless radar sensor can be powered by 12pcs x AA 1.5V, can last up to 12 years.

- Not affected by Dust, Steam...;
- Range up to 70m;
- High performance Sub-GHz Wireless communication;
- Ultra-low power with 12 years battery;
- Plug & Play.

## Typical Applications

- Level measurement in Tank;
- Level measurement in Silo;
- Level measurement for Liquid or Solid;

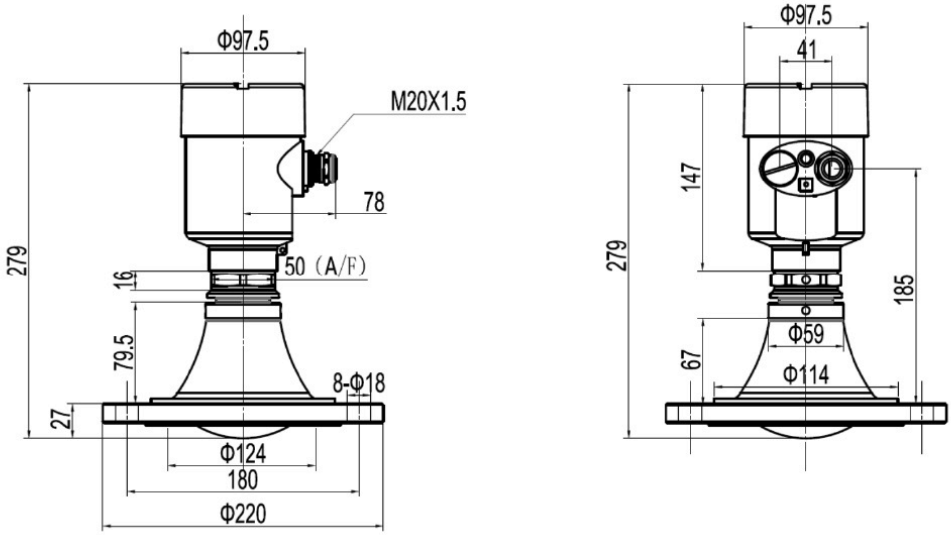
## Coalmine Application



## Cement Application



## Dimension Drawings




## Specification

| | |
|---|---|
| **SENSOR SPECIFICATION** | |
| Sensor technology | 26 GHz Pulse radar with lens |
| Measurement range | 10, 30, 70m |
| Resolution | 1.0 mm |
| Accuracy | +/- 5.0 mm |
| Beam angle | 8 degree |
| Lens material | Nylon/PEEK/PTFE/POM |
| Process temperature | -40 .. + 85oC standard, +120 oC optional |
| Process pressure | -1 .. + 4 barg |
| Ambient working temperature | -40 .. + 85 oC |
| Ambient working humidity | 0 .. 95% RH, non-condensing |
| **WIRELESS SPECIFICATION** | |

| | |
|---|---|
| Data speed | Up to 50kbps |
| Transmission distance, LOS | 1000m |
| Antenna | External Antenna 0 dbi |
| Functions | Sending data in interval |
| Battery | 12 x Battery AA Type 1.5VDC and 7..48VDC |
| Frequency Band | ISM 433MHz, Sub-GHz technology from Texas Instrument, USA |
| International Compliance | ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan) |
| Vietnam Type Approval Certification | QCVN 73:2013/BTTTT, QCVN 96:2015/BTTTT (DAVITEQ B00122019) |
| Security Standard | AES-128 |
| Ambient Operating temperature of complete set | -40oC..+60oC (with Lithium Ultimate AA battery) |
| Housing/Protection | Cast aluminum, Polycarbonate, IP67 |
| Mounting | Direct mount on flange |
| Dimension | 220x220x450 (without antenna) |
| Net weight | <= 10 kgs |

## Ordering Codes

| **Item code** | **Descriptions** |
|---|---|
| WS433-RD26L-SL-01 | WIRELESS 26GHZ RADAR LEVEL SENSOR WITH PA LENS FOR SOLID IN HIGH DUST ENVIRONMENT, SUS304 JIS10K 100A RF FLANGE, 0-30M CALIBRATED RANGE, -40 .. + 85 C, IP67 ALUMINUM HOUSING |
| WS433-RD26L-SL-02 | WIRELESS 26GHZ RADAR LEVEL SENSOR WITH PA LENS FOR SOLID IN HIGH DUST ENVIRONMENT, SUS304 JIS10K 100A RF FLANGE, 0-70M CALIBRATED RANGE, -40 .. + 85 C, IP67 ALUMINUM HOUSING |

⚠ Link for full datasheet:

⚠ Link for manual:

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