

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;

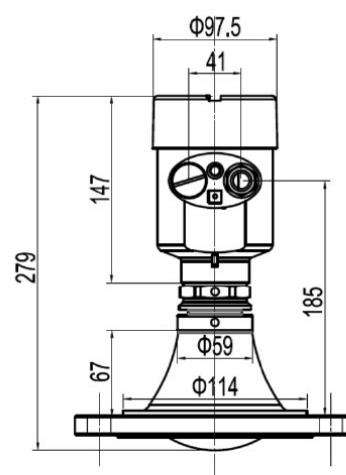
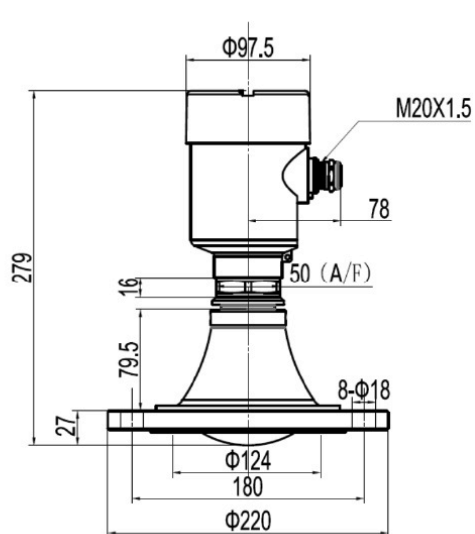
Coalmine Application



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:](#)

daviteq

Daviteq Technologies Inc



www.daviteq.com



info@daviteq.com

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★ Created Wed, Nov 25, 2020 9:19 PM by [Lộc Vĩnh Nguyễn](#)

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