

# Wireless Sub-GHz Laser Level Sensor WS433-LSL

SKU: WS433-LSL

Doc No: WS433-LSL-DS-EN-10

## WIRELESS SUB-GHz LASER LEVEL SENSOR WS433-LSL



1000m LOS



10-Year



IP67  
WEATHERPROOF



CE

FC

ARIB

EMC COMPLIANCE  
QCVN 73:2013/BTTTT  
QCVN 96:2015/BTTTT

WS433-LSL-H1.JPG

## INSTALLED ON STEEL GRAIN SILOS



WS433-LSL-H2.JPG

## Introduction

WS433-LSL is a low-power laser level sensor for Solid level measurement. With a dust tube accessory, it can be used in high dust environments like cement, grain, powder... It can measure up to 100m range. The wireless portion is Sub-GHz technology allows long-range transmission at ultra-low power consumption. It will connect wirelessly to a Wireless Co-ordinator WS433-CL or an IoT gateway with a built-in Coordinator. It can be configured the operation parameters like data sending interval, health check cycle... The complete set of the wireless laser-level sensor can be powered by 6 x AA 1.5V batteries for up to 10 years (depending on interval time).

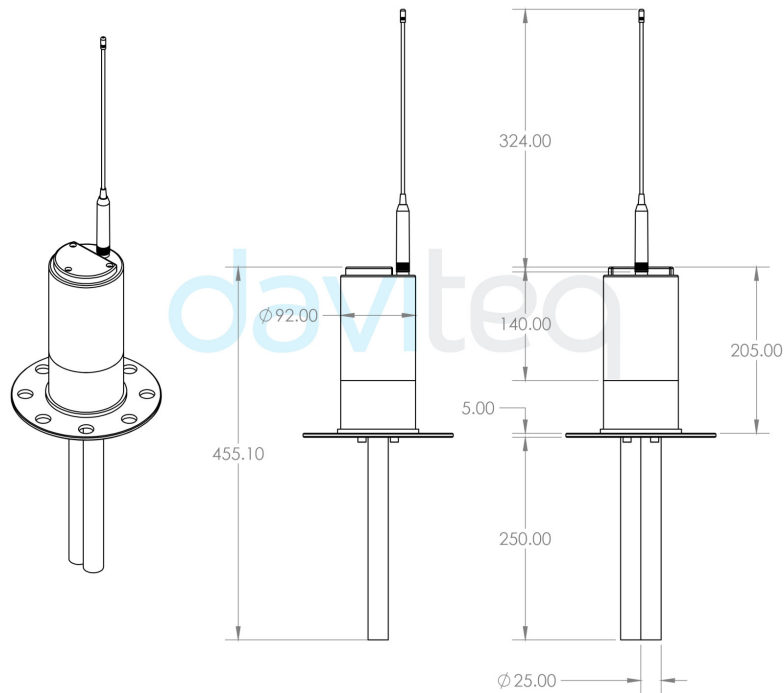
- 1 Range up to 100m;
- 2 Support Sub-GHz wireless;
- 3 Ultra-low power with 10 years battery;
- 4 Plug & Play.

## Typical Applications

- 1 Level measurement in Tank;
- 2 Level measurement in Silo;
- 3 Level measurement for any non-dark surface.

## Dimension Drawings

### DIMENSION DRAWING OF WIRELESS SENSOR (Unit: mm)



## Specification

| SENSOR SPECIFICATION        |   |
|-----------------------------|---|
| Sensor technology           | Eye-safe laser level sensor, class II laser |
| Measurement range           | Select 50, 100m                             |
| Dead zone                   | 0.03 m                                      |
| Resolution                  | 1.0 mm                                      |
| Accuracy                    | +/- 5.0 mm                                  |
| Dust tube                   | Yes, standard                               |
| Air purging port            | 1/4" NPT quick connector                    |
| Process temperature         | -10 .. + 60 oC standard                     |
| Ambient working temperature | -10 .. + 60 oC                              |
| Ambient working humidity    | 0 .. 95% RH, non-condensing                 |
| WIRELESS SPECIFICATION      |   |
| Data speed                  | 50kbps (default), 625 bps                   |
| Transmission distance, LOS  | 400m (2m height from ground)                |
| Antenna                     | Internal Antenna                            |

|                                     |   |
|-------------------------------------|---|
| Battery                             | 06 x AA 1.5VDC  |
| Frequency Band                      | ISM 433.92 Mhz, 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   |
| Mounting Method                     | JIS10K 80A Flange   |
| Ambient temperature                 | -10oC..+60oC (with AA L91 Energizer)  |
| Dimensions                          | 220x220x450 (without antenna)   |
| Net-weight                          | < 5 kgs   |
| Housing                             | Aluminum + Polycarbonate plastic, IP67  |

## Ordering Codes

| Item code     | Descriptions  |
|---------------|---|
| WS433-LSL-50  | WIRELESS SUB-GHZ LASER LEVEL SENSOR, RANGE 50M, 3-INCH FLANGE, DUST TUBE, IP67, AA BATTERY POWERED  |
| WS433-LSL-100 | WIRELESS SUB-GHZ LASER LEVEL SENSOR, RANGE 100M, 3-INCH FLANGE, DUST TUBE, IP67, AA BATTERY POWERED |

🔗 Link for full datasheet: <https://filerun.daviteq.com/wl/?id=cyV6RMRRcWkzTu0Azj9i4XUuzZiP0oHd>

🔗 Link for manual:

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