

# Wireless 3-AXIS Tilt Sensor WS433-AG

SKU: WS433-AG

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

## WIRELESS 3-AXIS TILT SENSOR WS433-AG



WS433-AG-H1.PNG

## TILT SENSOR FOR CRANE MONITORING



WS433-AG-H4.PNG

## Introduction

WS433-AG is a wireless Tilt Sensor, can be used to measure 3 tilt angles X, Y, Z of any object as Tower, Building, Tree, Electricity Tower, Telecom Tower, Bridges... The Tilt sensor utilises the combination of advanced Accelerometer and Gyro meter to deliver high accuracy and stable measurement of Tilt angle of 03 axis X,Y,Z. 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 sensor can last up to 10 years with 1 x AA battery.

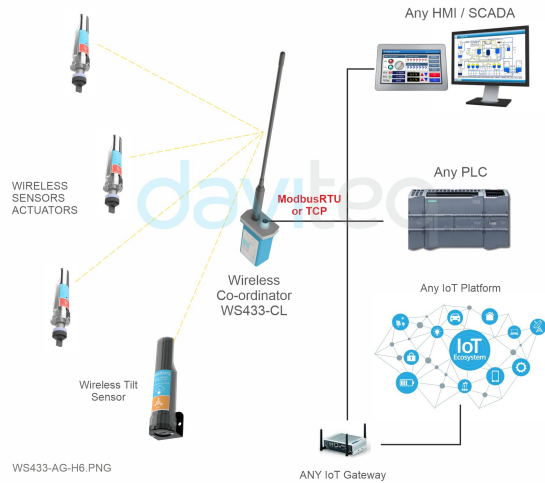
- 1 Advanced Accelerometer with Gyro meter to deliver high accuracy and stable measurement of Tilt angle of 03 axis X,Y,Z;
- 1 High performance Sub-GHz Wireless communication;
- 1 Ultra-low power with 10 years battery;
- 1 Plug & Play.

## Typical Applications

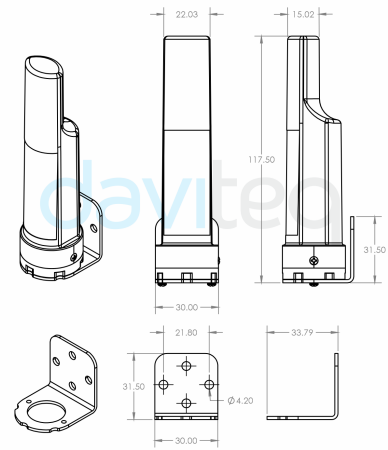
Monitoring Tilt of:

- 1 Telecommunication Tower;
- 1 Electricity Tower;
- 1 Building;
- 1 Bridges;
- 1 Trees;
- 1 Monuments;
- 1 Any infrastructures.

## CONNECT WIRELESS SENSORS TO any PLC, HMI, SCADA or IoT Platform



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



WS433-AG-H7.PNG

## Specification

SENSORS SPECIFICATION:	
Tilt Sensor	Built-in advanced accelerometer and gyro meter to deliver tilt angle measurement of X, Y, Z
Measurement range	$\pm 90^\circ$ of XYZ
Resolution	0.5°
Sensor sampling rate	1Hz max
WIRELESS SPECIFICATION	
Data speed	Up to 50kbps
Transmission distance, LOS	LOS 500m
Antenna	Internal Antenna, 3 dbi
Battery	01 x AA 1.5-3.6VDC, up to 10 years operation, depends on the configuration
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
Operating temperature of PCB	-40oC..+60oC (with AA L91 Energizer)
Housing/Protection	Poly-carbonate, IP68
Mounting method	Mounting bracket for wall mount
Dimension	125x30x30mm
Net weight	60g

## Ordering Code

Item code	Descriptions
WS433-AG-01	WIRELESS 3-AXIS TILT SENSOR 433MHZ, AA 1.5-3.6VDC BATTERY, IP67

⚠ Link for full datasheet: <https://filerun.daviteq.com/wl/?id=uvLXDHdZykf0Wap4RCFEQENu66cvr4lm>

⚠ Link for manual:



Daviteq Technologies Inc



[www.daviteq.com](http://www.daviteq.com)



[info@daviteq.com](mailto:info@daviteq.com)

🕒 Revision #8

★ Created Tue, Mar 16, 2021 11:27 PM by [Kiệt Anh Nguyễn](#)

✎ Updated Wed, Mar 17, 2021 1:11 AM by [Kiệt Anh Nguyễn](#)