

LORAWAN TILT SENSOR



SKU: WSLRW-AG

LoRaWAN TILT SENSOR
WSLRW-AG

LoRaWAN



WSLRW-AG-H1.JPG

WSLRW-AG is a LoRaWAN Tilt Sensor, inclinometer can be used to measure 3 tilt angles X, Y, and Z of any object such as a Tower, Building, Tree, Electricity Tower, Telecom Tower, Bridges... The Tilt sensor utilizes the combination of an advanced Accelerometer and Gyro meter to deliver high accuracy and stable measurement of the Tilt angle of 03 axis X, Y, and Z. With Ultra-low Power design and smart firmware allow the sensor can last up to 10 years with 02 x AA-type battery (depends on configuration). The sensor will transmit data in kilo-meters distance to the LoRaWAN gateway, any brand on the market.



LORAWAN COMMUNICATION

LoRaWAN communication standard to allow sensor connect to any LoRaWAN Gateway on the market.



10 YEAR BATTERY

Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 10 years with 02 x Type AA batteries.



HIGH ACCURACY & STABLE

Advanced Accelerometer with Gyro meter to deliver high accuracy and stable measurement of Tilt angle of 03 axis X,Y,Z.



IP68

For both indoor and outdoor applications

TILT SENSOR INSTALLED ON THE WALL



WSLRW-AG-H2.JPG

DAVITEQ TECHNOLOGIES INC

No.11 Street 2G, Nam Hung Vuong Res., An Lac Ward, Binh Tan Dist., Ho Chi Minh City, Vietnam

+84.28.6268.2523 / 6268.2524

info@daviteq.com

www.daviteq.com

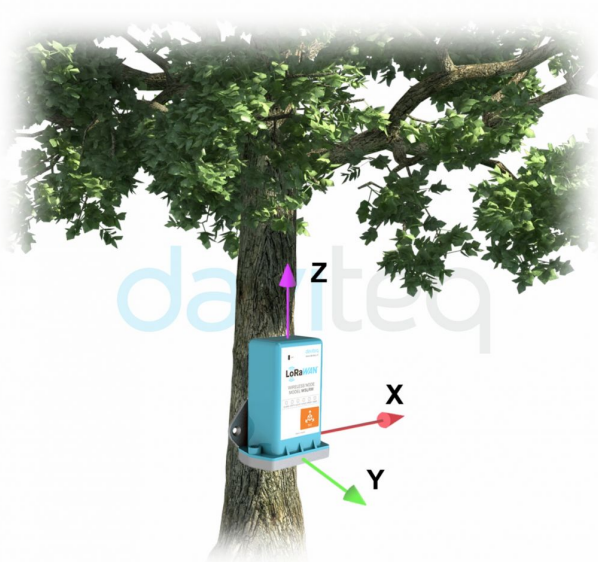
SEP-2022 | Doc No: WSLRW-AG-DS-EN-11

1/4

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	$\pm 0.1^\circ$ for AG-01 version $\pm 0.01^\circ$ for AG-02 version
Repeatability	$\pm 0.25^\circ$ for AG-01 version $\pm 0.01^\circ$ for AG-02 version
Performance in +/- 2.5° of Tilt (for AG-02)	+/- 0.00065° per °C drift, +/- 0.0622° max non-linearity, +/- 0.075° total error in 20 °C
Sensor sampling rate	1Hz max
LoRaWAN SPECIFICATION:	
Data rate	250bps .. 5470bps
Antenna	Internal Antenna 2.67 dBi
Battery	02 x AA size 1.5VDC, battery not included
RF Frequency and Power	860..930Mhz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN Class A V1.0.3
Data sending modes	interval time, and manually triggering by magnetic key
RF Module complies to	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval	
Working temperature	-40oC..+60oC (with AA L91 Energizer)
Dimensions	H106xW73xD42
Net-weight	190 grams
Housing	Aluminum + Polycarbonate plastic, IP67

TILT SENSOR INSTALLED ON THE TREE



WSLRW-AG-H3.JPG

TILT SENSOR FOR CRANE MONITORING



WSLRW-AG-H4.JPG

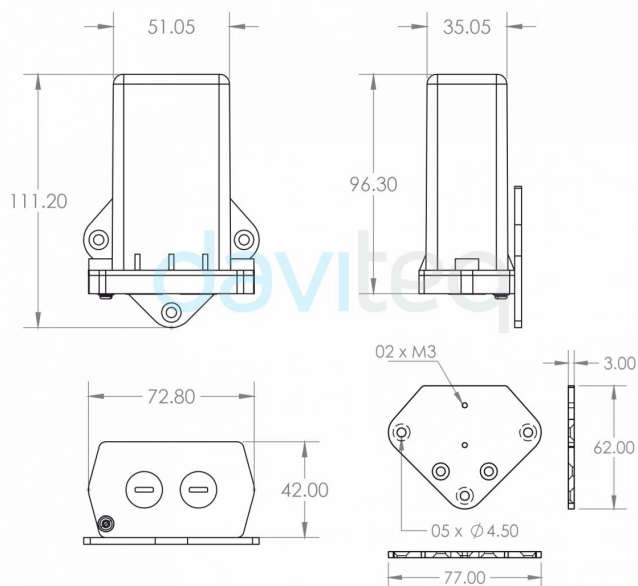
LoRaWAN NETWORK



WHAT'S IN THE PACKAGE?



DIMENSION DRAWING OF WIRELESS SENSOR



RECOMMENDED BATTERIES FOR LoRaWAN SENSOR

E91 AA Alkaline battery



-18 .. + 60 oC working temperature

10-year shelf life

3000 mAh Capacity

Price: 1X

L91 AA Lithium battery



-40 .. + 60 oC working temperature

20-year shelf life

3500 mAh Capacity

Price: 3.5X

WSLRW-AG-H8.JPG

ORDERING INFORMATION

ITEM CODE	DESCRIPTIONS
WSLRW-AG-01	Wireless LoRaWAN XYZ Tilt sensor, Internal antenna, 0.1° Resolution, Type AA battery 1.5VDC, IP68, 860-930 MHz
WSLRW-AG-02	Wireless LoRaWAN XYZ Tilt sensor, Internal antenna, 0.01° Resolution, Type AA battery 1.5VDC, IP68, 860-930 MHz

DAVITEQ TECHNOLOGIES INC

No.11 Street 2G, Nam Hung Vuong Res., An Lac Ward, Binh Tan Dist., Ho Chi Minh City, Vietnam

+84.28.6268.2523 / 6268.2524

info@daviteq.com

www.daviteq.com

SEP-2022 | Doc No: WSLRW-AG-DS-EN-11