

# LoRaWAN pH Transmitter



Smart Agriculture, Smart Building, Smart City, Smart Facility, Smart Factory, Smart Farm, Smart Utilities

SKU: WSLRW-PH100

## LoRaWAN pH TRANSMITTER WSLRW-PH100



Sensor Input port

WSLRW-PH100-H1.JPG



WSLRW-PH100 is a LoRaWAN wireless transmitter with built-in ultra-low-power amplifier for pH probe and temperature sensor like PT100 or PT1000, based on 14-year experience in design and manufacturing Industrial sensor of Daviteq Company. The transmitter can be configured with fix temperature compensation or automatic temperature compensation. It has been factory pre-calibrated for high accuracy and quick set-up. The Ultra-Low Power design and smart firmware allow the sensor to last up to 10 years with 02 x AA battery (depending on configuration). The sensor will transmit data over kilometers away to the LoRaWAN gateway, any brand on the market. Some typical applications are temperature monitoring for factories, agriculture, boilers...

### Applications

Water Quality Monitoring, Process Water Monitoring, Waste Water Quality Monitoring

### Notes For Applications

- ✓ **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 2 x AA batteries 1.5VDC
- ✓ **Pre-calibrated**  
Sensors are pre-calibrated at factory to deliver high accuracy and quick installation
- ✓ **Outdoor IP67**  
IP67 design for both Indoor and Outdoor applications and easy cleaning

## MONITORING pH IN WATER



WSLRW-PH100-H2.JPG

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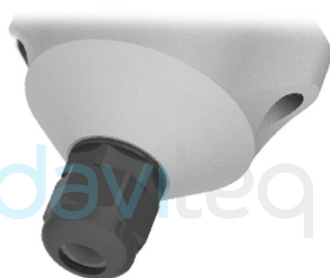
Updated date: Aug-28-2024

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Specification

pH Sensor Input	pH sensor
pH Measuring range	pH 0~14
Resolution of pH	0.1
Accuracy of pH	±0.1
Temperature Sensor Input	PT100, PT1000, Thermistor
Temperature measuring range	0~100°C
Temperature resolution	0.1°C
Working temperature	-40~60°C
pH Connector	BNC
Temperature Connector	Terminal block
COMMUNICATION	
SF Factors	SF7~SF12
Antenna	Internal Antenna 2.0 dBi
Battery	02 x AA size 1.5, battery not included
RF Frequency and Power	860~930MHz, 14~20dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN, class A
Data sending modes	Interval time and when alarm occurred
Certification	CE, FCC marks
Working temperature	-15~60°C (using L91 Energizer® battery)
Dimensions	H180xW90xD50mm
Net-weight	300g
Housing	Polycarbonate & POM plastic, IP67

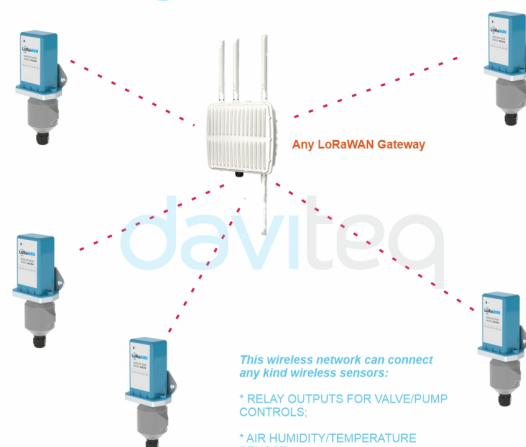
LoRaWAN NODE CONNECT WITH  
pH SENSOR VIA PG9 CONNECTOR



PG9 Connector  
Sensor Input Port

WSLRW-PH100-H3.JPG

LoRaWAN NETWORK



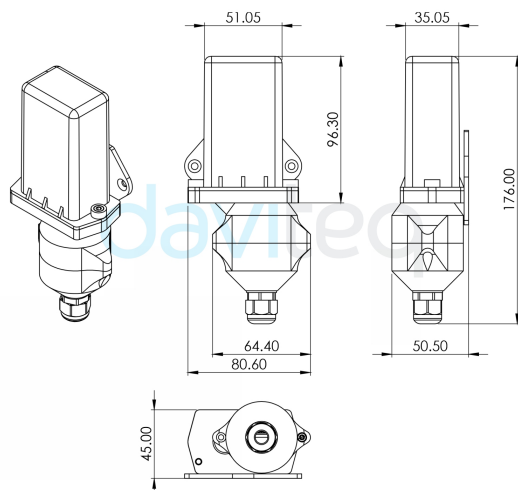
Any LoRaWAN Gateway

This wireless network can connect  
any kind wireless sensors:

- \* RELAY OUTPUTS FOR VALVE/PUMP CONTROLS;
- \* AIR HUMIDITY/TEMPERATURE SENSOR;
- \* CO2 SENSOR;
- \* AMBIENT LIGHT SENSOR;
- \* ...ETC

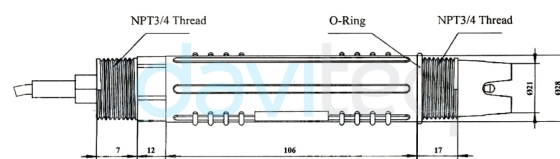
WSLRW-PH100-H4.JPG

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



WSLRW-PH100-H5.JPG

#### DIMENSION DRAWING OF pH PROBE (Unit: mm)



WSLRW-PH100-H6.JPG

#### RECOMMENDED BATTERIES

E91 AA Alkaline battery



-18 .. + 60 °C working temperature  
10-year shelf life  
3000 mAh Capacity  
Price: 1X

L91 AA Lithium battery



-40 .. + 60 °C working temperature  
20-year shelf life  
3500 mAh Capacity  
Price: 3.5X

WSLRW-PH100-H7.JPG

#### PRODUCT PACKAGE



WS5FC-GCB-H8.JPG

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Ordering Information

ITEM CODE	DESCRIPTIONS
WSLRW-PH100-PT100	LoRaWAN pH Transmitter for pH sensor with Pt100 temperature sensor for compensation, BNC connector, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930MHz for all regions
H087-0020	pH Sensor combo probe, In-line type, 3/4NPT, cPVC, 6m cable, BNC connector