

VWdot



VWdot4



Vibrating Wire Sensor Datalogger

Be the frontier of environmental monitoring

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

## Overview

Introducing the VWdot / VWdot4 datalogger - a robust and reliable solution for measuring frequency and thermistor temperature signals of vibrating wire sensors. With its IP65 compliant housing and low-power consumption, the datalogger ensures accurate and uninterrupted data collection even in challenging environments. The VWdot / VWdot4 datalogger is designed to meet the rigorous demands of civil engineering applications, making it a trusted choice for monitoring structural dynamics, geotechnical measurements, and more.

Equipped with a 32GB built-in Micro SD card, the VWdot / VWdot4 datalogger offers ample storage capacity for over 1 million data records. This extensive data storage capability enables comprehensive analysis and reference purposes, ensuring that no valuable information is lost during extended monitoring periods.

The VWdot / VWdot4 datalogger stands out for its cost-effectiveness and reliability. It has undergone rigorous testing and quality assurance procedures to deliver accurate and consistent measurements.



## Key Features



### Low-Power Consumption

Powered by two 18650 Li-ion battery, VWdot is able to operate for at least 8 months when RSSI is < 15; 16 months when RSSI is  $\geq 15$  (one measurement per hour).



### MQTT Protocol

Supporting MQTT protocol, VWdot allows acquisition and integration of various types of data.



### NB-IoT Wireless

Using the latest NB-IoT technology, VWdot can upload data to "dot" cloud server, achieving real-time monitoring advantage.



### Simple Operation

Measuring data can be uploaded to "dot" cloud service through simple set-ups on the Micro SD card.

## Applications

- ✓ **Water level monitoring** - Water level transducers measurement
- ✓ **Water pressure monitoring** - Piezometers measurement
- ✓ **Stress monitoring** - Rebar strain gauges measurement
- ✓ **Strain monitoring** - Strain gauges measurement
- ✓ **Load monitoring** - Load cells measurement
- ✓ **Crack monitoring** - Crackmeters measurement
- ✓ **Landslide monitoring** - Displacement transducers measurement

## Best Suited



New Construction for Site and Civil Engineering



Water Conservancy Construction



Bridge Engineering



Slope Safety

## Specifications

	VWdot	VWdot4
Measurement Type	Vibrating Wire Sensor	Vibrating Wire Sensor
Measuring Range	450 to 6000 Hz	450 to 6000 Hz
Accuracy	$\pm 0.01\%$ @ 3000 Hz	$\pm 0.01\%$ @ 3000 Hz
Channel	1	4
LPWAN	NB-IoT	NB-IoT
Network Protocol	MQTT	MQTT
Storage	32 GB Micro SD Card (expandable)	32 GB Micro SD Card (expandable)
Power Supply	18650 Li-ion battery x2	18650 Li-ion battery x3
Power Consumption	8 months (RSSI <15); 16 months (RSSI $\geq 15$ ) *one measurement per hour	15 months (RSSI <15); 24 months (RSSI $\geq 15$ ) *one measurement per hour
Temperature Type	Thermistor (resolution 0.1 °C)	Thermistor (resolution 0.1 °C)
Waterproof	IP65	IP65
Dimension (L x W x H)	100 x 100 x 60 mm (Antenna height not included)	160 x 160 x 70 mm (Antenna height not included)

\*All prices, features, and specifications are subject to change without prior notice.

## Be the frontier of environmental monitoring

Sanlien Technology is committed to making environments safe for humans. Hence, we insist on continuing R&D investment, perfecting our manufacture of monitoring systems, and expanding into Smart City and IoT monitoring. With more than 1,000 local and international customers, Sanlien is trusted by global customers with high standards. By working with renowned agents around the world, we ensure optimal performance and reliability of our services. With 50 years profound experience in Taiwan, Sanlien becomes the most exceptional provider measuring technologies in the Asia-Pacific region. Sanlien has conceptualized the idea of being a global partner into a three-in-one strategy: long-term deployment of globalization, integration of local resources, and localized operations. We shall march on step by step with the stamina for running a marathon.



Sanlien Technology Corp.

©2022 Sanlien Technology Corp. All rights reserved.