



Sanlien Technology Corp.

WBdot



Wheatstone Bridge Datalogger

Model: WD-1001

Be the frontier of environmental monitoring

www.sanlien.com

Introduction

WBdot, our latest Wheatstone bridge datalogger featuring LTE-M and NB-IoT wireless transmission technologies, is meticulously designed to meet the demands of contemporary monitoring systems. With its waterproof casing, WBdot ensures reliable performance even in challenging environmental conditions. Its low-power consumption allows for efficient data collection and seamless uploading to the cloud server, ensuring uninterrupted monitoring operations. Powered by two 18650 Li-ion batteries, WBdot delivers extended operation – 8 months with an RSSI below 15 and an impressive 16 months when RSSI is 15 or above – all while maintaining hourly measurements.

In addition to its advanced connectivity features, WBdot comes equipped with a built-in 32GB SD card, enabling local data recording and storage. This feature-rich datalogger distinguishes itself as a dependable choice, particularly excelling in civil engineering applications. Its robust design, coupled with efficient data management capabilities, positions WBdot as an ideal solution for monitoring projects that demand accuracy, durability, and seamless data integration.



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

Key Features



Low-Power Consumption



MQTT Protocol



LTE-M and NB-IoT
wireless transmission



Simple Operation

Best Suited



New Construction for Site and
Civil Engineering



Water Conservancy
Construction



Bridge Engineering



Slope Safety

Specifications

Accuracy	± 0.1 %
Applicable Bridge Resistance	350 Ω (Full Bridge)
Channel	1
LPWAN	LTE-M / NB-IoT
Measurement Type	Strain gauge sensors
Measuring Range	± 5000 micro-strain
Network Protocol	MQTT
Resolution	0.1 micro-strain
Storage	32 GB Micro SD card
Power supply	18650 Li-ion battery x2 (Supports 5–18 Vdc charging via solar panel or external source)
Dimension (W x L x H)	100 x 100 x 60 mm (excluding antenna)

*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 investments, perfecting our manufacturing 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 the optimal performance and reliability of our services. With 50 years of profound experience in Taiwan, Sanlien has become the most exceptional provider of 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.

©2022 Sanlien Technology Corp. All rights reserved.



Sanlien Technology Corp.

+886-2-2708-1730 | www.sanlien.com | sales@sanlien.com