

GEONET CELLULAR LOGGERS + DATA HOSTING SYSTEM



MODEL 8920 SERIES



The Model 8920 Series GeoNet Cellular Loggers + Wireless Data Hosting System with Cloud integration and secure data access

APPLICATIONS

Typical applications include...

- Groundwater monitoring
- Tailings dams
- Mining/slope stability
- Structural monitoring of buildings, bridges, excavations and tunnels
- Historical structures

INTRODUCTION

GEOKON Model 8920 Series Loggers offer a high-value cellular data collection option for all GEOKON vibrating wire instruments and digital sensor (MEMS IPI and VW) strings. Each logger comes from the factory ready for deployment and may commence with data acquisition in minutes, without needing to purchase SIM cards or contact a cellular provider.

Sensor data is collected and transferred via the cellular network to a secure cloud-based storage platform where it can be accessed through the GEOKON OpenAPI. Industry leading

data visualization software, such as Vista Data Vision, or the free GEOKON Agent program can be used with the OpenAPI for data viewing and reporting. Commissioning, billing and configuration are accomplished via the easy to use GEOKON API Portal. The portal allows users to activate loggers, change settings, configure sensor channels, and view current logger status.

The API Portal can be found at api.geokon.com and the GEOKON Agent program can be downloaded at www.geokon.com/software.

TILT LOGGER SPECIFICATIONS

Precision ^{1,2}	±0.0075° (±0.13 mm/m)
Nonlinearity	±0.005° across ±30° range (±0.09 mm/m)
Temperature-Dependent Uncertainty	±0.019°/°C (±0.33 mm/m/°C)
Resolution ²	±0.00025° (±0.004 mm/m)
Range	±30°

¹ Includes random walk (changes between consecutive readings that have no discernible cause) and seismic noise during testing.

² 99% confidence interval (i.e. 99 out of 100 individual readings fall within this tolerance).

CELLULAR VW LOGGER SPECIFICATIONS

Trueness	0.082 Hz
Frequency Precision ²	±0.146 Hz
Frequency Resolution	±0.002 Hz
Thermistor Accuracy	1% (0.5° C thermistor point match)
Thermistor Resolution	0.032° C
Scan Interval	10-1440 Minutes
Power Supply	Mains power or solar
Operating Temperature	-40° C to +85° C (range varies by power source)
VW Frequency Range	400-5000 Hz
Dimensions (L x W x H)	120 x 122 x 91 mm (single-channel, addressable, tilt) 160 x 260 x 91 mm (four-channel) 180 x 280 x 101 mm (eight-channel)

ORDERING INFORMATION

Example Part Number for a Logger: 8920-LTM-01C-CBL

- MODEL TYPE:** ○
8920: Cellular
- NETWORK TYPE:** ○
LTM: LTE-M
03G: 3G
- LOGGER TYPE:** ○
01C: Vibrating Wire
04C: 4-Channel Vibrating Wire
08C: 8-Channel Vibrating Wire
ADR: Addressable
TLT: Tilt
- SENSOR CONNECTION:** ○
CBL: Cable Gland
NAP: Not Applicable

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