



# HydroTerra

Environmental Monitoring Specialists

## Stygo 5

**Geotechnical Monitoring**

**Vibrating Wire Telemetry Hub**

Stygo 5 is a versatile 2, 4 or 8 channel multi-communication enabled IoT device designed specifically for remote Geotechnical and Structural monitoring applications

The device is fitted with large rechargeable internal batteries and a specially designed clip on 3W solar panel for long term reliable monitoring



# Overview

The versatile device offers the ability to use across a wide variety of applications such as Tailings Storage Facilities, Slope Stability Monitoring, Dam Safety Monitoring, Infrastructure and Construction Monitoring.



VWT comes as either single, 4-channel or 8-channel option for versatility around nested bores or clustered vibrating wire instruments.



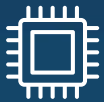
Internal rechargeable battery pack or long-life non rechargeable with clip on solar power options. Ultra-Low power draw with internal battery backup.



Easily change settings, log time, transmission rate, alarms with OTA firmware updates onsite over the cellular or Iridium Satellite Networks.



Simply activate Bluetooth by pressing the button and connect via our free mobile Android and Apple mobile app for all your device configuration requirements



Internal storage of up to 260,000 events



Compact form factor Approx 112 x 177 X 63 mm



**DataStream™**

by HydroTerra



Environment • Water • Geotechnical • Data

Powered by EWS, through our  
official partnership





# Stygo 5

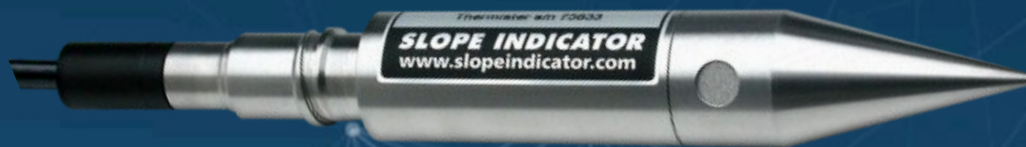
## Integrated VWP Examples



Heavy-Duty VW Piezometers



Corrosion-Resistant VW Piezometers



Push-In Piezometers



Multi-Level VW Piezometers

# HydroTerra Platform

## FEATURES



Monitor environmental sensors and device locations and parameters



Configure sample rates, device outputs and variable alerts



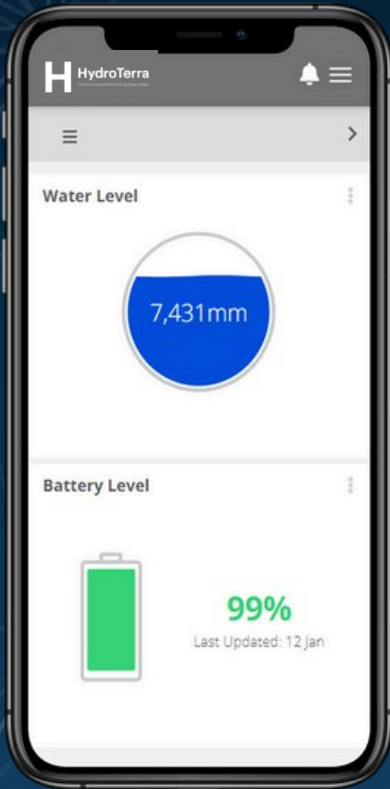
Control device outputs such as pumps, valves and gates



Receive SMS or email alerts based on variable thresholds



Download device data as csv files and images



## OVERVIEW

Sensors are remotely monitored with our custom cloud based platform. Interrogate volume and level trends, change sampling intervals and set SMS and email alerts. Our platform is flexible and modular meaning we can set it up the way you like from our library of maps, charts, gauges and controls.

## OTHER SERVICES

- Integrate other sensors to our platform
- White label the platform with your company branding
- Send your sensor data to third party platforms



DataStream™

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# Specifications

## Physical property

Dimensions ( W x H x D )	4ch VWT -Approx 112 x 177 X 63 mm 4ch VWT -Approx 112 x 177 X 63 mm	
Body weight	without battery	18650 approx 49g each D cell approx. 111g each
Waterproof level	IP67 rating	

## Operating environment

Temperature ( 1, 2)	-20 ... 65 °C	Storage (Without battery) -40 ... 65 °C
Humidity	5 ... 60% RH	

## Power source

Internal power (3)	2x Rechargeable 18650 battery /Suggested model: ICR18650-26JM 2x Non-rechargeable (D cell) battery /Suggested model: ER34615M	
External power	DC 12 ...24 V /1 A Battery or Solar power with M8 connector	

## Output Option

Channel	4-8 VWP's and 4-8 Temperature	
Measurement of Vibrating wire	Measurement Excitation	Automatically set 5V to 12 V
	Sweeping frequency range	450...Hz
	Accuracy	+/-0.1% Full Scale
Measurement of Temperature	Accuracy	+/-0.1°C

## Connectivity

USB	1x Micro USB
Wireless	Bluetooth 5

## System

Clock	RTC Network time Sync support	Accuracy 70 ppm (20 ppm at 25 °C)
Display	LEDs indicating status	
Configuration	Remotely change setting with two-way communications established via an application gateway	

## Logging

Number of channels	20	
Reading interval	sec/min/hr	Max. 24:00:00
Memory	4MB / 256,000 Events (Non-volatile-Log)	
Software	EWS Logger V00.01.137 or higher	Compatible with Window 10
File format	.csv	

# Specifications

## Built-in sensor / function

Internal battery voltage	Yes
External voltage supply	Yes
Temperature	Yes
Radio signal	Yes
GPS tracking	Only cellular modem
Barometer	No

## Network communication

Iridium	Protocols	Short Burst Data
	Coverage	Worldwide
4G Cellular LTE - M/NB-IOT	Protocols	MQTT
	Network support	Telstra (Australia) Most major networks globally
	Coverage	4 million Sqr km

## Antenna type

Built-in antenna	Yes
External antenna	Optional