



HydroTerra

Environmental Monitoring Specialists

Stygo 4

Low-Cost Groundwater Satellite Battery Powered IoT Sensor Hub



Stygo 4 is a low-cost groundwater Nanosatellite battery powered IoT sensor hub with integrated sensor options.

Connectivity is provided via Australian company Myriota's Low Earth Orbiting constellation providing affordable, massively scalable, long battery life and global connectivity.

Overview

Highly rugged and resilient, IP67-rated, UV resistant enclosure, allowing trusted performance for remote deployments under any conditions worldwide. Various mounting options includes bracket/pole and direct install to groundwater monuments/standpipe covers



Nanosatellite - retrieve data from anywhere on earth. Currently has a median latency of less than 4 hours.



Can integrate with most sensors via RS485



Waterproof IP67, UV resistant, compact and ultra-rugged housing with easy field access to the battery compartment and micro USB port



Ultra-low power, multi-year life from 4 x AA lithium batteries (e.g. Energizer L91) or can be externally powered by a 12-24V input. Can achieve in excess of five years autonomous operation.



Global Navigation Satellite System (GNSS) for geolocation and tracking



Height 198mm (includes antenna and cable relief)
Width 95mm, Depth 47mm, 3m Cable.



Battery Caddy - Unique battery locking mechanism. Grooved design to prevent incorrect insertion.



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SMARTS

Configurable Alerts Configure email and sms alerts based on levels remotely from our cloud-based device management system.

Nanosatellite Lower cost, faster to build and cheaper to launch than traditional satellites and can do almost everything a conventional satellite does. With these low barriers to entry, they are a cost-effective option for new technology.

TECHNICAL SPECIFICATIONS

Power Supply Built-in replaceable 4 x AA Lithium Batteries or 12-24v external power supply. 5-24V configurable power output for sensors

Field Updates Bluetooth Low Energy (BLE) or USB-C

Battery Life 5 years based on 4 readings and 1 message per day (estimate only)

Supported Battery Types Ultimate Lithium Energizer

Temperature Operational | -30°C to +70°C / -22°F to 158°F
Storage | -30°C to +70°C / -22°F to 158°F

Location Service Global Navigation Satellite System (GNSS) for geolocation and tracking

Cable / Connection Comes standard with a 3m flying lead connection, customization options and connections available.

Regulatory Approvals (pending) RCM, FCC Parts 15 and 25, CE Red, ENACOM, ANATEL

Environmental IP-67, RoHS / REACH

Interfaces

Input Analogue - Configurable to be either, 4-20mA, 0-5v, 0-10v.

Digital I/O - 2 Configurable to be either: Digital IN, Digital OUT, Pulse Counter

Serial - 2 Configurable to be either: RS-232, RS-485

I2C - I2C

BLE - Support for BLE commissioning and updates



DataStreamTM

by HydroTerra

HydroTerra Platform

FEATURES



Monitor environmental sensors and device locations and parameters



Configure sample rates, device outputs and variable alerts



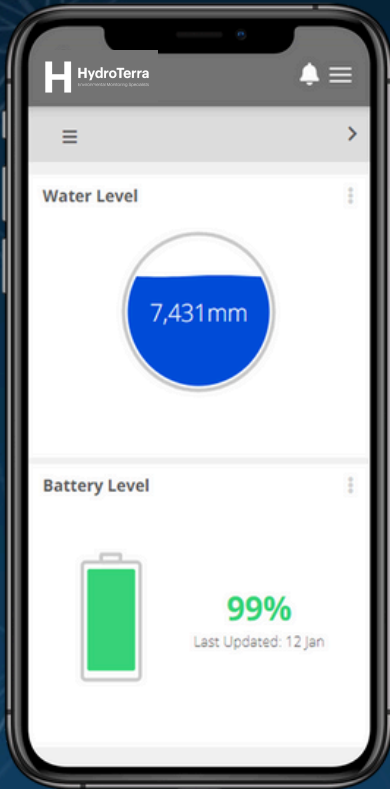
Control device outputs such as pumps, valves and gates



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



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