

# Water Monitoring - Turbidity and Total Suspended Solids

Real-time, continuous environmental monitoring for water parameters of turbidity and total suspended solids (TSS) for a variety of freshwater monitoring and management applications.

Adroit is New Zealand's leading real-time environmental monitoring provider for councils, worksites, construction, civil and heavy industries.



## Turbidity & Total Suspended Solids Monitoring

Adroit provides complete managed environmental monitoring solutions which include equipment, cloud platform & app, installation, servicing and support. Continuous monitoring of turbidity and total suspended solids in freshwater environments, provides valuable data and insights that can assist in critical decision making and site management.

Total suspended solids is the dry-weight of suspended particles, that are not dissolved in water. Turbidity is the measure of relative clarity of water. Both parameters are vital water quality indicators, and critical when monitoring and managing freshwater environments. Common use cases include, worksites, stormwater, rivers, streams and catchments.

Environmental water monitoring gives your team access to real-time data which can be visualised on the Adroit App



Visualise multiple parameters in your water environments from any connected device

## Key benefits



### Feature rich app

Customisable thresholds and alerts. Downloadable data and available APIs for integration



### Real-time monitoring

Get a clear view of turbidity and TSS from your water environments



### Increased productivity and cost-efficiencies

Real-time data aids decision making to maximise efficiencies and minimise environmental impact



### Accurate and reliable measurements

Highly accurate multi-beam technology, cost-effective, reliable, field proven and factory calibrated sensor



### Health and safety

Help ensure a compliant, healthy and safe environment for employees and communities



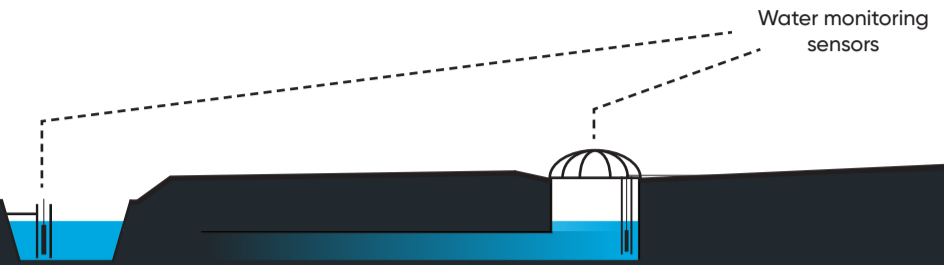
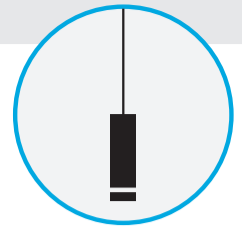
### Compliance and complaint mitigation

Historic and real-time data to aid management of compliance and complaint mitigation

#### Compliance Reporting

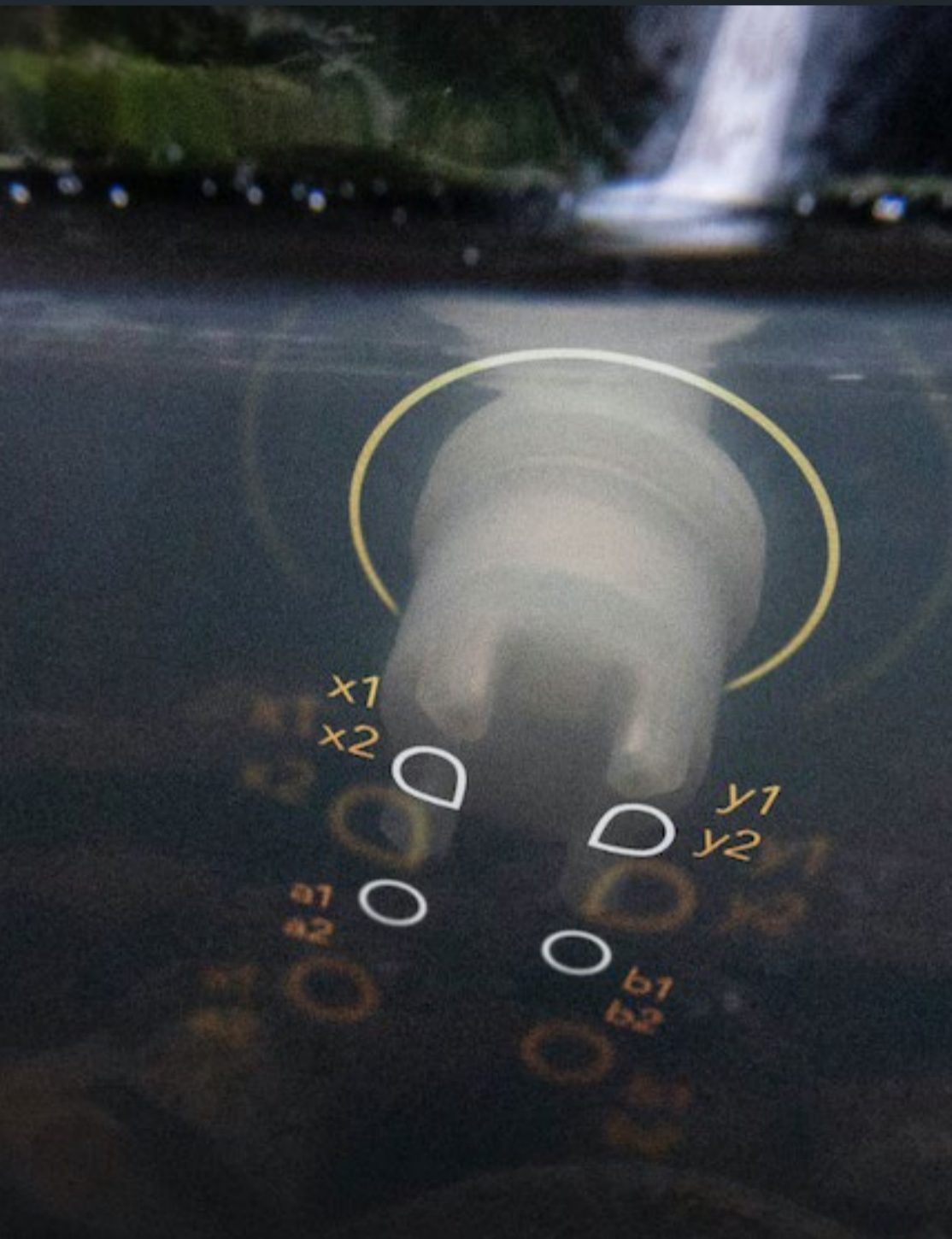
Adroit products provide accurate, cost effective, continuous monitoring to assist with health & safety, complaint mitigation and internal compliance management. Sensors are validated to compliance standards, however for some applications are not suitable for statutory compliance reporting. We recommend discussing your reporting requirements with your Adroit sales lead and where appropriate consulting a compliance specialist.

# How it works



## Turbidity & total suspended solids monitoring features

- Highly accurate sensor featuring multi-beam technology
- Suited to a wide range of NZ water environmental conditions
- Turbidity and TSS parameters
- Self-compensating for common measurement error
- Minimal calibration required eliminates sensor drift
- Solar powered for remote installations
- Measurement Range, 0 to 2.5g/L normal activated sludge
- Immersion style sensor for continuous on-line monitoring



## Turbidity and total suspended solids

Turbidity and total suspended solids (TSS) monitoring is cost-effective, easy to install and maintain. The sensor can be calibrated against international standards or directly against the monitoring site and can be run on solar power. The sensor measures turbidity and TSS environmental parameters in a variety of applications to monitor water quality, aid in compliance and help manage environmental impact.

The sensor uses multi-beam technology to provide high levels of accuracy that single-beam sensors can't provide. The sensor generates multiple light beams that are synthesized into a ratio-metric algorithm that, once calibrated, precisely calculates turbidity and total suspended solids and self-compensates for common sources of measurement error. The sensor comes in a rugged package developed to endure harsh New Zealand environments.

Turbidity and TSS monitoring can be used in a wide range of applications including stormwater and site run-off, sediment and erosion control, industrial processes and monitoring of wastewater. Plus a range of agricultural settings, including horticulture, livestock farming and crop farming to monitor run-off and water tributaries.



## Build a sustainable future with technology and expertise

Spark IoT is proud to bring the expertise of Adroit to our customers across the public sector, worksites, construction, civil and heavy industries.

Help your business prepare for the future with Spark IoT, contact your Spark Client Lead or [iotsales@spark.co.nz](mailto:iotsales@spark.co.nz) to find out more.

