

Water Product Portfolio

WATER INSTRUMENTS & SYSTEMS





Acoem Water Product Portfolio Instruments & Systems



AUTOMATIC SAMPLERS

- MAXX portable & stationary samplers
- MAXX wall mounted samplers
- MAXX 12 VDC samplers with active & passive cooling
- MAXX stainless steel housing samplers suitable for hazardous areas
- MAXX desert first flush samplers



MONITORING SYSTEMS

- Mobile monitoring stations
- · Combined sampler and WQ stations
- Buoy mounted monitoring stations
- Groundwater Remote Area Monitoring Station (GRAMS)
- Flow and flood level stations



PROBES, SONDES & TRANSMITTERS

- · Aquaread multi-parameter sondes
- Aquaread sonde loggers



ONLINE ANALYSERS

- Tethys UV300 low cost monitor
- Tethys UV500 multi-parameter analyser
- · Heavy metals analyser
- Process analysers



FLOW / LEVEL / PRESSURE

- Hydrovision radar flowmeters
- Hydrovision flow profiler
- Hydrovision acoustic flowmeter
- Aquaread level sensors

Automatic Samplers

MAXX MINI SAMPLERS

The MAXX TP6 Series is an ultra-compact and lightweight automatic water sampler available in either peristaltic or vacuum-pump options. The TP6 is an unrivalled measuring device for volume determination. Highly accurate sample volume measurement with easy cleaning, modern and ergonomic design.

MAXX 12 VDC REFRIGERATED SAMPLERS

The TP5 C is a compact water sampler with integrated distributor, and diverse bottle options from composite to discrete. Comes with an insulating base with either refrigerated or non-refrigerated cooling.

MAXX STATIONARY SAMPLERS

Fixed site sampler in plastic or stainless steel housings, especially suited for high ambient temperatures. For automatic sample extraction according to the vacuum or peristaltic principle. Mains operation.

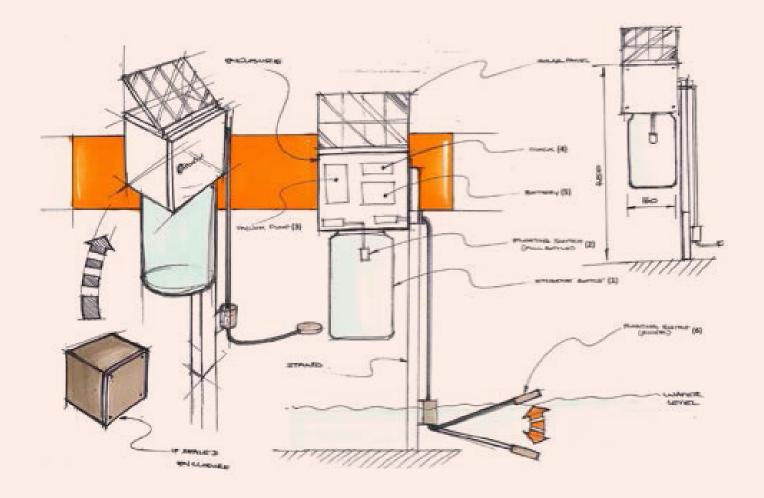
Other options available:

- · Self-emptying sampler
- · High-pressure sampler (>20 bar).









MAXX WALL SAMPLER

The MAXX TP5 W is a wall-mounted unit. It has the same controller that it used on the stationary and 12 VDC compact samplers. Stand-alone or can be combined with any collection or refrigerator.

MAXX DESERT FIRST FLUSH SAMPLER

The desert sampler is a low cost alternative to typical manual sampling or expensive mechanical automatic sampling systems.

The desert sampler is a self-contained vacuum water sampling system. The system can be installed in-situ and left dormant for up to several months. When a sampling event occurs the sampler is triggered and a sample is automatically collected using the battery-powered vacuum pump into the sample collection bottle. The sample is now ready for collection and analysis.

Monitoring Systems

At Acoem, we design and manufacture a wide range of water monitoring stations for unattended measurement of water bodies. Our stations have been used on dams, rivers, stormwater and waste water discharge and open water.

FIVE STEPS TO BUILDING A MONITORING SYSTEM:

- 1 Select a mounting style
- 2 How is the station to be powered?
- 3 What parameters are to be measured?
- 4 How do you want to view/download data?
- 5 Are there any other options required?





BUOY MOUNTED MONITORING STATIONS

A complete Water Quality Monitoring Station built on a buoy platform. Solar powered, with data logging up to 2 years and remote telemetry (3G or radio modems) the station can provide data indefinitely without being tied to specific locations. Ability to add beacons, weather sensors, navigational aids and many more options.

MOBILE MONITORING STATIONS

For mid length but non-permanent monitoring, Acoem's mobile WQMS is an ideal solution. Capable of being deployed in 30 minutes, the station is equipped with a WQ sonde with up to 15 parameters as well as optional individual sensors for solids or depth. Solar powered, with data logging up to 2 years and remote telemetry (3G or radio modems), the station can provide data indefinitely without the need for infrastructure support. For when the job calls for something between a portable handheld and a permanent station.

GROUNDWATER REMOTE AREA MONITORING STATION (GRAMS)

Solar-powered bore water monitoring station, designed to monitor the bore water composition using a WQ probe measuring up to 15 parameters. The Sonde is connected to an interface device with SDI-12 to a data logger with up to 2 years storage.

The solar power system is capable of 5 days backup. Data from the station is downloaded remotely via the 3G or radio modem.

COMBINED SAMPLER & WQ STATIONS

Engineered to be rugged, secure and low maintenance the Acoem Water Quality Sampling Station is the ideal system to measure and sample water discharge or runoff. The station has been designed for those who need to measure the non-standard (lab analysed) parameters during a rain or discharge event and don't want to rely on field technicians taking manual samples. Combining in-situ monitoring and automatic sampling, this system automates collection and notifies when an exceedance occurs or a sample is collected.

FLOW & FLOOD LEVEL STATIONS

Flow and flood level stations are critical for creeks and streams subjected to flooding during rain events. Our monitoring stations provide real-time data and alerting from sensors connected to these stations. Powered by solar and battery backup these stations are autonomous and will alert key stakeholders of impending flooding and provide critical information for mine site discharge or community alerts.







Probes, Sondes & Transmitters

AQUAPROBE MULTI-PARAMETER SONDES

Aquaprobe sonde packages are ideal if you are new to water quality monitoring or a seasoned integrator and user. They provide measurements for all of the commonly monitored parameters through to CDOM, Nitrates and chlorophyll (25 measurements total). Aquaprobes come fitted with base parameters of pH/ORP, Electrical Conductivity, Dissolved Oxygen and temperature. Cable lengths are available from 3 – 50+ metres. SDI-12 or Modbus module supplied as option for output to 3rd party devices or log data on the handheld GPS Aquameter or field Aqualogger.

DISSOLVED OXYGEN

The S423/C/OPT probe is used for the optical measurement of oxygen in pure and process waters. The principle of measurement is based on the effect of dynamic luminescence quenching by molecular oxygen. Provided in a stainless body, the DO probe has no moving parts, is reliable and easy to maintain and has a Modbus output for 3rd party controllers or loggers.



Online Analysers

TETHYS UV300 LOW COST MONITOR

The UV300 is a cost effective water analyser for applications focused on one or two parameters. UV spectroscopy is well known for its stability and low operating cost. With this technology the UV300 can measure parameters like organic matter, Nitrate, Colour, Aromatics Hydrocarbons (PAH). Complementary modules allow the measurement of PO₄, CI₂, NO₂, Fe, Al by colorimetric method and Turbidity by laser diode. External probes can be added for physicochemical parameters like pH, ORP, Dissolved Oxygen (DO) and Conductivity.





TETHYS UV MULTI-PARAMETER ANALYSER

The UV500 is an online water analyser based on a high resolution UV-visible spectrograph. It allows the simultaneous monitoring of many different parameters for waste water treatment plants or river monitoring stations with excellent stability and low operating cost.

Along with PO_4 , CI_2 , NO_2 , Fe and Al, this analyser is also capable of measuring:

• H₂S

Phosphate

• Colour

· UV₂₅₄-COD

Nitrate

Conductivity

Ammonia

Hydrocarbons

• pH / ORP

• Dissolved Oxygen (DO).

Turbidity



Flow / Level / Pressure

HYDROVISION: Q-EYE MIII

The HydroVision Q-Eye MIII is a portable flow meter for pipes or open channels. It is designed for applications in full or partially full pipes 100-200 mm in diameter, or open channels with flow depth 40-2000 mm.

The submergible depth and velocity sensor which measures only $15 \times 25 \times 108$ mm is the smallest sensor of this type currently available.

HYDROVISION Q-EYE PSC MT

The HydroVision Q-Eye PSC MT is a stationary flow meter for pipes and open channels. It uses advanced Doppler profiling technology to directly measure velocity profiles, making it the best choice for sites with non-uniform, rapidly changing, backwatered, near zero, negative or reverse flow conditions.

The submergible depth and velocity sensor which measures only $15 \times 25 \times 108$ mm is the smallest sensor of this type currently available.

HYDROVISION Q-EYE RADAR MT

The HydroVision Q-Eye RADAR MT is a non-contact channel flow meter. It consists of a radar-based velocity sensor and an ultrasonic or radar-based water level sensor.

