

Aquacell Module

The Aquacell Sampling Module is common to the whole range of Aquamatic's MCERTS certified Automatic Wastewater Samplers. The Aquacell Module employs a wide bore air pump vacuum sampling system to automatically collect repeatable and accurate effluent samples, without any effect on the effluent being collected. Straightforward to program, operate and maintain, Aquamatic's Aquacell Samplers are a market-leading range in the UK and in many countries around the world.

The air pump vacuum sampling system featured within every Aquacell Module provides for a reliable, representative and repeatable sample without the weaknesses that can be associated with alternative sampling techniques. Programming set-up is simplicity itself, with sample volumes from 50 - 500ml (and above) and sample intervals from 1 minute to almost 100 hours.

Sample extraction can be time based or triggered by external sources such as flow meters, level sensors, pH meters, PLC's etc. All Aquacell Sampler models are certified to the UK Environment Agency's MCERTs standard for Automatic Wastewater Sampling Equipment and also the International Standard for Wastewater Samplers ISO 5667-10.

By using this Module across the complete Aquacell Sampler range, programming, operation, maintenance and spare parts remain consistent, regardless of how many units are in use or whether they are Portable, Wall-Mounted or Stationary systems. All Aquacell Samplers can extract samples from a pressurised effluent source, using Aquamatic's Pressurised Pipeline Interface. Please see individual data sheets or our web site for more information on all Aquamatic products.

Features of the Aquacell Module

- All models certified with MCERTs standard for Continuous Water Monitoring Equipment
- Incorporates Air Pump Vacuum sampling principle
- Excellent sample repeatability and high accuracy of sample shot volume
- Robust construction materials throughout
- Simple to program, clean and maintain
- Easy sample shot volume adjustment
- Virtually unlimited sample volume using multiple shot per sample facility
- 350+ sample shots from internal battery on a full charge
- Ø12mm intake hose increasing to Ø16mm at discharge to minimise blocking risk
- Optional connectivity to external equipment such as flow meters, level sensors, pH meters etc via the Ancillary Signal Connection
- Compliant with the requirements of the International Standard for Wastewater Samplers ISO 5667-1



Product Specifications

GENERAL	
Media source suitability	Wastewater from non-pressurised sampling point (or via Pressurised Pipeline Interface)
Sample extraction method	Air pump vacuum system
Environmental suitability	Not suitable for use in areas classified as hazardous zones
Sampling method	Time - Sampling frequency 1 min - 99hrs 59min Flow - 4-20mA or pulsed volt-free contact Event - volt-free contact from external device
Maximum lift height	>7m
Transport velocity	0.5 m/s (average) over 7m lift
Sample shot volume	50 - 500ml (larger total is possible with multiple shots/sample)
Sample shots per battery charge	350+ from fully charged Aquamatic battery (@ 1.8m lift)
Sample shot cycle time	30s approximately with 4m lift
Max sample media temperature	60°C
Ambient operating temp	See individual Product Data Sheets for details
MATERIALS	
Aquacell Module	Sealed polyurethane mouldings and stainless steel components
Sample Chamber	Acrylic or glass (option)
Sample Chamber top	Standard: polypropylene/stainless steel/silicone rubber Optional: PTFE/stainless steel/silicone rubber
Intake Hose with Filter	Standard: Braided PVC/stainless steel Filter Other options available on request
Sample Collection Vessels	See Sample Collection Vessel Data Sheet for details
MECHANICAL	
User Interface	17 Button Keypad incorporating tactile keys 16 x 2 line backlit LCD
Intake Hose:	
<i>Portable models</i>	2 metre long with 5 x Ø12mm intake ports (2m extension hoses available as required)
<i>Stationary models</i>	10m (5m with S50) with 5 x Ø12mm intake ports
Sample tract diameter	Ø12mm increasing to Ø16mm (Ø19mm with Bottler) between Intake Filter and sample discharge
Environmental Protection	Electrical/electronic components housed in humidity controlled enclosures. See individual Product Data Sheets for specific IP ratings
Humidity control	Replaceable Dessicant Bag with graduated Humidity Indicator visible on Keypad
STANDARDS COMPLIANCE	
All Aquacell models compliant with UK Environment Agency's MCERTs for Continuous Water Monitoring Equipment	
Water quality - Sampling - Part 10: Guidance on sampling of waste waters ISO 5667 - 10	