



USI Hydrocell

Intelligent Wastewater Samplers

WASTEWATER SAMPLERS

INTELLIGENT USI FUNCTIONALITY

The Hydrocell wastewater sampler is specifically designed to collect composite (flow, event, or time proportional) samples of trade effluent discharges in industrial applications. A robust industrial design with state of the art touch screen programming and graphical display makes the Hydrocell the product of choice for all your wastewater sampling needs.

The Hydrocell range of stationary samplers consists of a single bottle wall mounted unit, a twin bottle non-refrigerated unit, and a refrigerated 4 or 8 bottle unit.

All units are programmed and operated using the user friendly USI touch screen interface, which is renowned for its intuitive operation and ease of programming. The large graphical display allows the user to see the fill status of the bottles without the need to open the refrigeration chamber to check contents.

Sampling can be time based or triggered by external instruments such as flow meters, level meters, pH meters, PLCs, etc.

The refrigerated model includes frost protection as standard, at no extra cost, due to the innovative use of a thermoelectric cooler which in freezing conditions acts as a heater. So whatever the conditions, the temperature and integrity of your sample is maintained. The thermoelectric cooler is highly robust due to its lack of moving parts or circulating liquid, and is therefore far more reliable and requires less maintenance than a traditional compressor cooling unit.

The Hydrocell 2/4/8 features an intelligent distribution arm that uses microprocessors to accurately locate the sample bottles for spill free operation.

Hydrocell 1



Hydrocell 4



Hydrocell 2



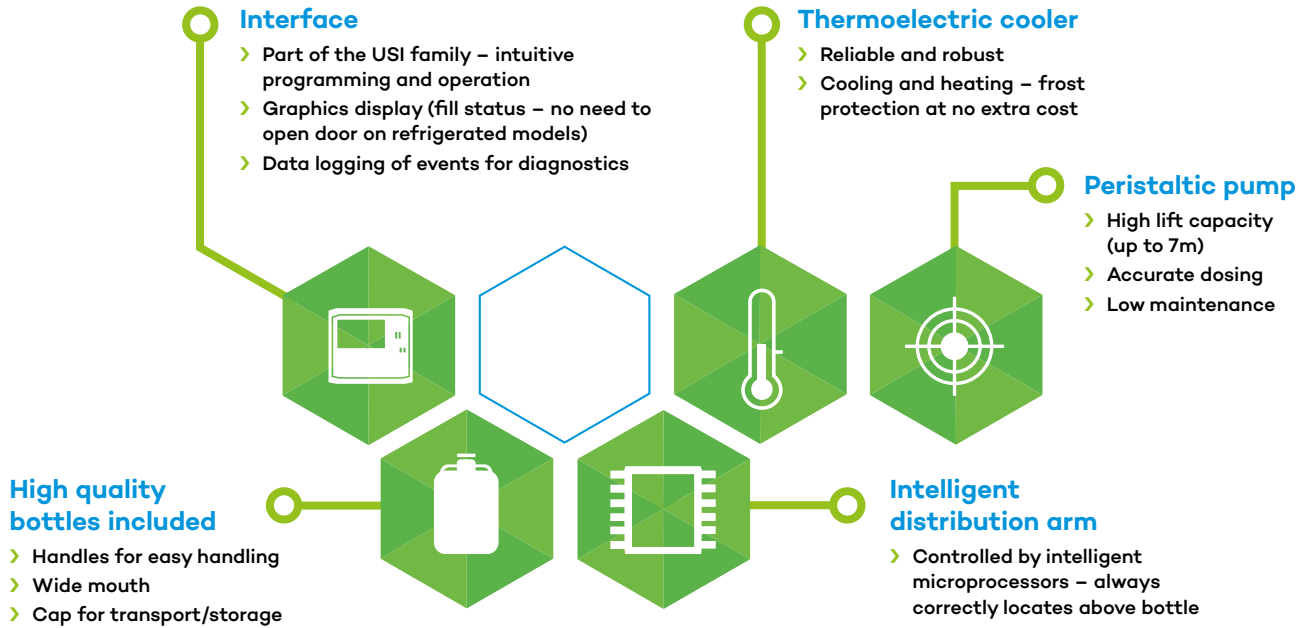
Peristaltic Pump



Thermoelectric Cooler



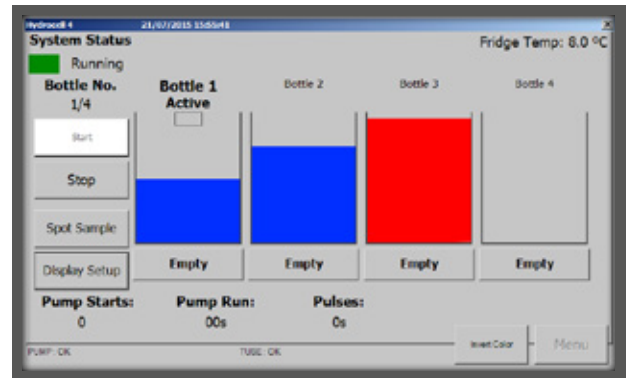
FEATURES AND BENEFITS



STUNNING TOUCH SCREEN DISPLAYS

The Hydrocell is part of the innovative USI range of instrumentation, and as such features the same familiar and easy to use interface as found on its counterparts in the process instrumentation range.

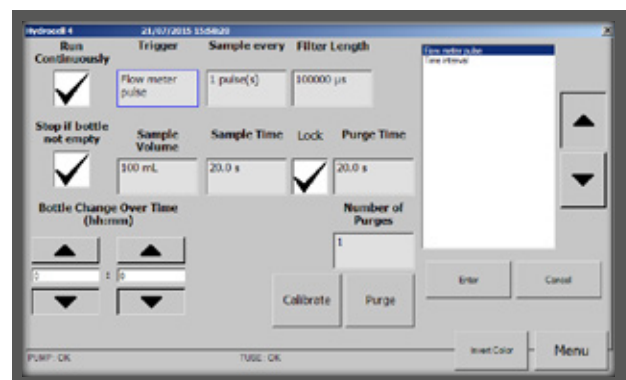
The Hydrocell software removes the complexities typically associated with programming industrial instrumentation, and instead offers the user clear and precise options on its industrial touch screen interface. The graphical display offers the user clarity of information, with fill status of bottles clearly identifiable as images on the screen. This is of particular benefit on the refrigerated versions as it negates the need to open the compartment door therefore affecting the sample temperature.



Hydrocell 4 System Status



Beautifully Simple – Windows CE is recognised as the most reliable and easy to use operating system.



Sampling Set-up

SPECIFICATIONS

Model	Hydrocell 1	Hydrocell 2	Hydrocell 4	Hydrocell 8
GENERAL				
Bottles	1 x 10 litre LDPE (optional polypropylene)	2 x 10 litre LDPE (optional polypropylene)	4 x 10 litre LDPE (optional polypropylene)	8 x 4 litre PPCO
Refrigeration	Not available	Not available	Yes	
Frost protection	Not available	Not available	Yes	
Dimensions (cm)	37 (W) x 40 (H) x 32 (D)	68 (W) x 100 (H) x 46 (D)	78 (W) x 120 (H) x 80 (D)	
Operating temperature	-20 to +70°C	-20 to +70°C	-20 to +70°C	-20 to +70°C
USER INTERFACE				
Display	7 inch (800 x 480 pixels) full colour graphical display with anti-glare cover			
Programming	Touch screen (optional wireless keypad)			
Operating system	Windows CE 6.0 R3 (licence included)			
Enclosure rating	IP65			
Logging	2GB SD card records sampling events, alarm conditions, pump starts, pumped volume, and configuration.			
SOFTWARE				
Modes	Fully user programmable for: calibration volume, line purge, start bottle, bottle sequence, continuous or fixed cycle, sample interval, refrigeration temperature			
Display features	Graphical display of bottle filling action, current fill status, alarm conditions, spot sampling			
Engineering	Password protected engineering mode for diagnostics, testing, and software upgrades			
POWER				
Supply (AC)	85-240V 3.15A AC			
Supply (DC)	24V 12A DC			
PUMP				
Media source suitability	Wastewater from non-pressurised submersed sampling point			
Type	Peristaltic with 24Vdc motor			
Pump tube	Thick walled marprene tube, 8mm internal diameter			
Intake tube	Braided LDPE up to 40m length			
Maximum lift	7 metres (23 feet)			
Repeatability	Typically ±5 ml (this will vary depending on the density of liquid)			
CONTROL				
Timed sample trigger	Pulsed input / 4-20mA input / contact closure, fully user programmable			
Time based	Fully user programmable			
OUTPUTS AND COMMUNICATIONS				
Alarms	2 x User programmable SPCO rated at 5A@ 230Vac			
Digital	2 x USB, 1 x Ethernet			

WATER AND WASTEWATER SPECIALISTS

Built on its strong research and development capability, Smart Storm has always been at the forefront of innovative products for the water and wastewater industries, and has won many prestigious UK and European awards for its innovative technology.

With over 20 years' experience in monitoring and treating water and wastewater across all industries, Smart Storm designs its instrumentation with the end user firmly in mind, and has the knowledge and expertise to support your needs.



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