

TECHNICAL SPECIFICATIONS

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Performance

Sample extraction method:	Air pump vacuum system.
Maximum lift height:	> 7 metres.
Transport velocity (nominal):	0.5 metres / sec.
Sample shot volume range:	10 - 500 ml (10-100ml when sampler is used with either of the 12 bottle bottlers).
Sample shot cycle time:	approx. 30 seconds (with 4 metres lift).
Intake hose purging:	Air purging before and after sample induction.
Wetted parts – Materials of construction,	
Sample chamber/Sample chamber top:	glass / polypropylene / silicone rubber.
Intake hose:	PVC / Polyurethane.
Sample collection vessels:	various formats – polyethylene, polypropylene, P.E.T. and glass (see sample collection vessels below).
Intake hose:	2 metre long nylon reinforced flexible PVC incorporating coarse intake filter plus 2m long intake hose extensions as required.
Sample tract diameter:	12mm increasing to 16mm (22mm when bottler is in use) between sample intake and sample discharge.
Maximum sample media temperature:	60°C.
Ambient temperature range,	
Aquacell P2-COMPACT:	0 - 45°C.
Aquacell P2-COOLBOX:	-10°C - 40°C.
Aquacell P2-MULTIFORM:	0 - 45°C.

Sample collection vessels,	
Aquacell P2-COMPACT:	1 x 5 litre polyethylene.
Aquacell P2-COOLBOX:	1 x 5 litre polypropylene.
Aquacell P2-MULTIFORM:	1 x 25 litre polyethylene. 12 x 0.7 litre glass. 12 x 1 litre P.E.T. 24 x 1 litre polypropylene.

Optimum sample temperature (0-5°C)
maintenance duration at 15°C
ambient temperature
(Aquacell P2-COOLBOX): 5 days.

Mechanical

Dimensions,	
Aquacell P2-COMPACT:	428 mm high x 320 mm wide x 376 mm deep.
Aquacell P2-COOLBOX:	805mm high x 430 mm base diameter.
Aquacell P2-MULTIFORM:	650 mm high with 1 x 25 litre container, or 780 mm high with bottler x 447 mm base diameter.
Freezer, standard (ancillary to Aquacell P2-COOLBOX):	902 mm high x 540 mm wide x 635 mm deep.
Freezer, bulk (ancillary to Aquacell P2-COOLBOX):	965 mm high x 1283 mm wide x 654 mm deep.
Weight (excluding Power Option / Collection vessel[s]),	
Aquacell P2-COMPACT:	6.0 kg.
Aquacell P2-COOLBOX:	5.2 kg (Aquacell P2 sampler unit) +12.5kg (cool box).
Aquacell P2-MULTIFORM:	6.5 kg.
Weight add-ons over 1kg,	
Integral battery:	2.7 kg.
Mains connection:	1.6 kg.
Bottler:	2.0 kg.
Construction -Sampler/collection vessels:	Plastic mouldings with tubular aluminium connecting components.
Environmental protection:	Electrical / electronic components housed in IP65 Sealed humidity controlled enclosure.
Humidity control:	Dessiccant bag with 3 stage humidity indicator on Control panel.
Security:	Various locking points provided such that, when secured with optional locking cord and padlock (not supplied) the sampler is rendered tamper-proof.

Power Supply

Power options (To order):	Integral battery. Mains connection. Mains connection with integral float charged battery. Separate 12V battery connection.
Power requirement,	
Mains powered samplers:	110 / 230VAC @ 50 / 60HZ (To order).
Battery powered samplers:	12V 7Ah min.
Power consumption,	
Mains powered samplers:	100VA max.
Battery powered samplers:	12V @ 5A. max.
Quiescent current in LOW POWER MODE (RS232 interface not fitted):	3mA.
Battery consumption per sample shot (3 metre lift, sampling every 30 min, LOW POWER MODE selected):	0.0205Ah.

User interface

Control panel:	17 button keypad with 16 x 2 alpha numeric liquid crystal display.
Remote control input ¹ :	Normally open volt free contact pair.
Integrated flow input ¹ :	Normally open volt free contact pair.
Instantaneous flow input ¹ :	4-20 mA into 255 ohm.
Sample acquired output ¹ :	Normally open volt free 50V DC 1A contact pair will close for 2 seconds when the sample induction phase is terminated by water bridging the electrodes in the sample chamber.
Sampler malfunction output ¹ (not available when LOW POWER MODE selected):	Normally open volt free 50V DC 1A contact pair will close when system is healthy and open for 2 seconds or longer when one or more of the following fault conditions occur: <ol style="list-style-type: none">1. Probe open circuit.2. Probe short circuit.3. Guard probe hit.4. Low voltage.5. Timed out .6. Bottler fitted (when optional bottler is fitted but sampler is programmed for no bottler).7. Bottler missing (when programmed for bottler).

	8. Temperature sensor (when optional temperature sensor is fitted).
	9. Bottler failed.
	10. Power supply failed (where there is no battery backup).
	11. Ancillary signal cable open circuit.
RS232 output ² :	9 pole 'D' connector suitable for connecting to the serial port of a PC.
PC software requirement ² :	Microsoft™ Windows 95, Microsoft™ Windows 98, or Microsoft™ Windows 2000 and Microsoft™ Hyper Terminal.

Standards Compliance

Water quality - Sampling - Part 10:
Guidance on sampling of waste waters: ISO 5667 - 10.

EC Directive 89/336/EEC on
electromagnetic compatibility (EMC),
Emissions standard: EN 50081 - 1.
Immunity standard: EN50082 - 1.

EC Directive 73/23/EEC on
safety objectives for the low voltage
directive: BS EN 61010 - 1.

UK Environment Agency specification
for automatic sampling equipment for
UWWTR applications
(Aquacell P2-COOLBOX only): E32.

¹ Requires Ancillary signal connection (Fitted) Part No. CL-4004.

² Requires RS232 interface (Fitted) Part No. CL-4006.