

## Specifications Sheet – CONDUCTIVITY series Controllers

Using Aquarius' conductivity controllers is a rewarding experience for the user. Automatic bleed control using our APL technology greatly increases the effectiveness of Inhibitor protection and disinfection levels, enhanced savings on water and chemical usage with substantial decrease in electricity running costs.

These units work well with Aquarius Technologies peristaltic pumps or other brands via supply of power to the designated output which is labelled in the control box. The standard pumps come in 1 or 3 ltr/hr capacity.

Please see the chart of available solenoid kits containing various sizes.

Note: For solenoid sizes over 20mm a separate take off may be required.



Models where Non-oxidising biocide are used				
Detail Specification	CON100	CON110	CON111	CON113
Dose – Inhibitor	Optional	Optional	1.0 ltr/hr	3.0 ltr/hr
Manifold	Optional	Yes	Yes	Yes
Sensors Fitted	Flow/Conductivity/Temperature Probe			
Shipping Dim. & Weight	52cm x 62cm x 23cm and cubic weight is 18kgs (CON100 is 29cm x 26cm x 24cm, 5kgs)			
Communications Port	Interfaced to any RS232 device via the DB9 plug on the circuit board located internally			
Electrical Supply	220 – 250Vac 50 or 60 Hz, 10Amp continuously powered "clean" mains supply – 7Amp output relays			
Alarms - User Defined Alarms - No-volt Contact	All defined set points are able to be associated with alarm outputs as +, -, or +/- ranges. A standard common no-volt alarm is incorporated in all controllers for DDC operation.			
Data Logging	Data logging of analogue readings and the relay ON times is standard – Log can be set from 1 min to 240 min intervals. At 30 min intervals, the log can contain more than 30 days of data, downloaded either locally to a laptop or remotely via a GSM modem.			
Manifold Ratings Press. & Temp. rating Flow rate required Plumbing	Manifolds are designed from uPVC and rated to 700 kPa at 50 °C. A minimum flow rate of 12 ltr/min is required to activate the flow sensor Plumbing inlet & outlets are 20mm BSP fem. Threads or can be fitted with 19mm hosetails			
Inhibitor Dosing	Inhibitor can be dosed according to impulse from water metering. Water Meter is an add-on based on the size required. Other modes include Bleed, Continuous or against Flow.			

Pumps Models	
Peristaltic	Available in 1 & 3 ltr/hr @ 350kPa. These pumps are specially designed to be used with APL control and recommended to be used at 50% duty cycle
Peristaltic - Variable	Available in 1 & 3 ltr/hr @ 350kPa. These pumps are specially designed to be used with APL control and recommended to be used at 50% duty cycle
High Pressure Pumps	Available in 1, 2, 5, 10 & 20 ltr/hr with variable control.

Module Designation	pH - values	ORP - mV	Conductivity – mS/cm	Temperature °C
Operating Range	N/A	N/A	0 – 9.99 mS/cm	0 – 100 °C
Resolution	N/A	N/A	0.01 mS/cm	0.1 °C
Accuracy	N/A	N/A	+/- 0.02 mS/cm	+/- 0.2 °C
Repeatability	N/A	N/A	+/- 0.01 mS/cm	+/- 0.2 °C
Alarm Range	N/A	N/A	+/- 0 – 2.0 mS/cm	N/A
Dead Band	N/A	N/A	0.05 mS/cm	N/A
Control Type	N/A	N/A	On/Off	N/A
Sensor Press. Rating	N/A	N/A	700 kPa	700 kPa
Sensor Temp. Rating	N/A	N/A	50 °C	50 °C

**Accessories to Complete and Maintain the System**

<b>Bleed Solenoid</b>	Standard Bleed Solenoid 15mm comes standard with controller. Options of 20mm, 25mm, 40mm & 50mm are available
<b>Weatherproof Socket</b>	10 Amp weatherproof power sockets with relay activation
<b>Extended Solenoid Cable</b>	240 Vac extension cable of 5m or longer for remote bleed solenoids
<b>Water Meter</b>	An impulse water meter that provides pulses proportional to flow. This is to allow Inhibitor dosage in proportion to system make-up rate
<b>Water Usage Metering (WUM)</b>	By adding a WUM card, water usage readings will be reflected on the controller and can also be data logged. Readings will show month-to-date and year-to-date figures of make-up, bleed and backwash
<b>Tank Alarm</b>	To provide warning when chemical tank is near empty. Alarm can also be sent via SMS when Communications Bundle is installed

**Optional Communications Package to Enhance the System**

<b>Communications Bundle</b>	GSM modem with AquaGuard 2 software can be added to enable remote access and downloading of data from the controller. User will also be able to receive controller alarm via SMS
<b>AquaGuard 2</b>	AquaGuard 2 software for local access/downloading of data from controller into computer spreadsheet and graph format
<b>4-20mA Analogue Input</b>	Accepts a 4-20mA signal from a stand-alone meter. Data are displayed on the Aquarius Controller and data logged. Alarm can also be activated via SMS.
<b>BMS Card</b>	A plug-on card that provides 4 analogue signals as 4 - 20 mA + 4 events as contact only signals – means of data transfer to BMS system
<b>Modbus</b>	Modbus 485 card to enhance digital data communications (2 way) between BCMS and controller

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