Specifications Sheet – *Trade Waste* Disinfection Controllers

Aquarius Trade Waste & Disinfection Controllers are specially designed to treat industrial and commercial water which could have harmful effect to people's health, safety or the environment. Using automated ORP and dual pH control, our controllers will ensure the water is properly treated before release.

Dual pH control is also used for disinfection systems where both base and acid applications are needed.

Models for Trade Waste Applications using Sodium Hypochlorite		
Detail Specification	**TDM10000 (manifold)**	**TDP10000 (No manifold)**
Dose - Conductivity	Optional	N.A.
Dose – Acid	Optional	Optional
Dose – Base	Optional	Optional
Dose – Sodium Hypo	Optional	Optional
Dose – Sodium Bromide	Optional	Optional
Sensors Fitted	Flow/Conductivity/Temperature & pH/ORP/Ground Reference Probes	pH Probe
Shipping Dim. & Weight	52cm x 62cm x 23cm and cubic weight is 18kgs	
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. The alarm signals may be directed to various output destinations. 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	

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	ORP - mV	Conductivity – mS/cm	Temperature °C
Operating Range	0 – 14	0 – 999	0 – 9.99 mS/cm	0 – 100
Resolution	0.01	1	0.01 mS/cm	0.1
Accuracy	+/- 0.02	+/- 1	+/- 0.02 mS/cm	+/- 0.2
Repeatability	+/- 0.02	+/- 2	+/- 0.01 mS/cm	+/- 0.2
Alarm Range	+/- 0 – 3.5	+/- 0 – 400	+/- 0 – 2.0 mS/cm	N/A
Dead Band	N/A	N/A	0.05 mS/cm	N/A
Control Type	APL	APL	On/Off	N/A
Sensor Press. Rating	700 kPa	700 kPa	700 kPa	700 kPa
Sensor Temp. Rating	50 °C	50 °C	50 °C	50 °C

Accessories to Complete and Maintain the System

Weatherproof Socket	10 Amp weatherproof power sockets with relay activation
Extended Solenoid Cable	240 Vac extension cable of 5m or longer for remote bleed solenoids
Water Meter	An impulse water meter that provides pulses proportional to flow. This is to allow Inhibitor dosage in proportion to system make-up rate
Water Usage Metering (WUM)	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
Tank Alarm	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

Communications Bundle	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
AquaGuard 2	AquaGuard 2 software for local access/downloading of data from controller into computer spreadsheet and graph format
4-20mA Analogue Input	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.
BMS Card	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
Modbus	Modbus 485 card to enhance digital data communications (2 way) between BCMS and controller