

Specifications Sheet – pH series Single Modular Controllers

Aquarius pH Controllers use advanced Aquarius Proprietary Logic (APL) to provide precise dosage for tight pH control. This ensures that your water treatment system is operated at a most efficient pH level. Our controllers 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. Weather proof GPO sockets can also be used.



| Models for single modular pH controllers | | | | |
|---|---|----------|---|------------|
| Detail Specification | PHS100 | PHS100WP | PHS101 | PHS103 |
| Dose – Acid or Base | Optional | N.A. | 1.0 ltr/hr | 3.0 ltr/hr |
| Sensors Fitted | pH/Ground Ref Probe | | Flow/Temperature & pH/Ground Ref Probes | |
| 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 | 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. | | | |
| Alarms - No-volt Contact | 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 hoesetails | | | |

| 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 | N.A. | N.A. | 0 – 100 |
| Resolution | 0.01 | N.A. | N.A. | 0.1 |
| Accuracy | +/- 0.02 | N.A. | N.A. | +/- 0.2 |
| Repeatability | +/- 0.02 | N.A. | N.A. | +/- 0.2 |
| Alarm Range | +/- 0 – 3.5 | N.A. | N.A. | N/A |
| Dead Band | N/A | N.A. | N.A. | N/A |
| Control Type | APL | N.A. | N.A. | N/A |
| Sensor Press. Rating | 700 kPa | N.A. | N.A. | 700 kPa |
| Sensor Temp. Rating | 50 °C | N.A. | N.A. | 50 °C |

Accessories to Complete and Maintain the System

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|-----------------------------------|--|
| 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

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|------------------------------|--|
| 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 |

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