

# Stranco<sup>®</sup> Analyzers/ Controllers

## Ezetrol<sup>®</sup> *plus* Controller for Measurement of Free Chlorine, pH and Temperature

### Introduction

The Ezetrol<sup>®</sup> *plus* controller has been especially designed for all types of swimming pools, spas and water features that are dosed with chlorine. The Ezetrol<sup>®</sup> *plus* controller has a very flexible approach to measurement input options offering parameters of free chlorine, pH and temperature as standard. Other parameter combinations such as dual chlorine inputs and pH measurement or the measurement of free chlorine, pH and redox are also available. In addition the Ezetrol<sup>®</sup> *plus* controller controls chlorine and pH with metering pumps or with an electric positioner. The development of this practical, cost-effective measurement system stems from over three decades of expertise in the use of measurement and control technology in swimming pools.

### General

Disinfection of swimming pools is achieved through the addition of chlorine, normally sodium hypochlorite or calcium hypochlorite. Of prime importance is maintaining the dosing of these chemicals according to the recommended standard values. Offering a free chlorine range of 0-10.00 mg/l, from a uniquely robust and maintenance friendly amperometric potentiostatic free chlorine sensor, the Ezetrol<sup>®</sup> *plus* controller has the flexibility to work with all types of pools and spas, both indoor or outdoor, even with the low chlorine levels as found with our Barrier<sup>®</sup> M ultraviolet disinfection systems.

### Standardised Board Mount Assembly

The Ezetrol<sup>®</sup> *plus* controller is available as a complete unit with sensors for the measurement of free chlorine and pH values as well as an optional additional sensor for the measurement of redox potential.

The Ezetrol<sup>®</sup> *plus* controller offers configurable 0-20mA outputs for BMS or chart recorders, as standard, as well as an on-board print manager and RS 485 connections, for the optional Wallace & Tiernan<sup>®</sup> ChemWeb Server (PC interface unit).

### Key Benefits

- User friendly menu structure
- Advanced diagnostics and calibration review menus
- Dosing time monitoring
- Dosing delay after circulation start
- Display and compensation of temperature
- Automatic adaptation of control parameters
- Adjustable limit contacts
- Configurable limit contacts
- 0-20 mA BMS outputs
- Flow control valve and hydromechanical electrode cleaning by quartz grit for stable measurement
- Comprehensive connections to CMS software, via Wallace & Tiernan<sup>®</sup> OPC-Server or ChemWeb-Server, SECO-S7 and Profibus DP



The Ezetrol<sup>®</sup> *plus* controller is supplied pre-mounted on uPVC board for ease of installation and routine servicing. It is also available with second sample cell and free chlorine sensor, for use with single water volume which passes through a common filtration system and is zoned for a distribution to a main pool and teaching pool, for example, which requires monitoring and separate control.

## Product Sheet

## Ezetrol® plus Electronic module

### Measuring range:

Free chlorine (Cl<sub>2</sub>): 0-10.00 mg/l  
pH value: pH 4.00-pH 9.00  
Redox: 400-900 mV (optional)  
Temperature: 0-50 °C  
Flashing display when measuring range limits are exceeded

### Measurement inputs:

3-electrode chlorine sensor  
Combined measuring and reference pH electrode to DIN  
Combined measuring and reference redox electrode to DIN  
Pt 1000 for temperature  
All measurement inputs electrically isolated up to 50 V to earth.

### Digital inputs:

3 volt-free contacts (sample water monitoring, external stop, single supply-tank-empty signal) electrically isolated up to 50 V to earth

### Switching outputs:

4 x dosing outputs  
(2 relay contacts for each, chlorine and pH dosing)  
2 x limit contacts / alarm contacts  
Max. 1250 VA at 250 V AC  
Max. 150 W at 220 V DC  
Switching contact condition LED

### Analogue output:

3 x 0/4-20 mA, load ≤ 600 Ohm  
electrically isolated up to 50 V to earth

### Interfaces:

RS 485 for connection to ChemWeb-Server, OPC-Server, Data Access or visualisation software CMS or RS 232 for direct connection of a protocol printer

### Display:

Back-lit LCD text display 2 x 16 characters

### Power supply:

115 V/230 V ± 10 %, 50 – 60 Hz, 14 W

### Ambient temperature:

0-50 °C

### Enclosure:

IP 66

### Testing and marking:

Conforms to CE (89/336/EWG)  
EMC tests to EN 61326  
Electric safety to EN 61010

### Dimensions:

(W x H x D): 320 x 310 x 175 mm

### Weight:

Approx. 5 kg

## Ezetrol® plus Flow Cell Module

Transparent flow cell body with Multi-Sensor for temperature measurement, flow rate monitoring, sample water earthing and for accommodation of up to three sensors: Cl<sub>2</sub>, pH and redox electrodes, pressurised (Sample water return possible).

### Required operating water flow rate:

30 l/h

### Sample pressure at measuring cell inlet:

Min. 0.2 bar, max. 4 bar

### Back-pressure at measuring cell outlet:

Max. 1.5 bar

### Sample Connections:

Push fit for 5/16" OD Nylon Hose

### Weight:

Approx. 2 kg

### Dimensions:

(W x H x D): 215 x 375 x 155 mm

## Ezetrol® plus system (Complete panel mounted)

### Dimensions:

(W x H): 600 x 400 mm

### Weight:

Approx. 15 kg

### For data connections the following systems are supported:

OPC-Server V2.007, ChemWeb-Server, visualisation software CMS, SECO-S7, Profibus DP Interface converter.



**Western Region**  
(08) 9412 6100  
hydramet@hydramet.com.au

**Central Region**  
(08) 8374 7800  
hydrasa@hydramet.com.au

**Eastern Region**  
(03) 9325 3900  
hydravic@hydramet.com.au

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