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hydroCHEM



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TPS Australia - Quality hand-made instruments since 1968.

hydroCHEM Conductivity and pH Controller



[Full Size Image](#)

- ◆ *Automatic controller for Conductivity and pH. Ideal for Hydroponic applications. Designed to control external pumps, valves etc. Temperature readout is provided. Supplied with sensors and calibration standards.*
- ◆ *The new advanced design makes this unit far superior and yet cheaper and easier to use than other brands. The hydroCHEM is the culmination of over 30 years manufacturing experience.*
- ◆ Waterproof construction rated to IP65.
- ◆ Supplied with 24V DC output control cable for low-powered devices or relay etc.
- ◆ Memory for 2300 stored readings, with automatic datalogging facility (optional).
- ◆ RS232 Interface for remote monitoring of system (optional).
- ◆ Pump sensor only allows automatic dosing when circulating pump is on.
- ◆ Large digit mode makes the data easy to read in any light or from a distance.
- ◆ Automatic calibration
- ◆ 4 Terminal conductivity sensor technology resists fouling for
- ◆ Quick-dose function
- ◆ Temperature readout with optional temperature control output.
- ◆ Fully adjustable ON and OFF times can be set separately for Conductivity and pH pumps, eliminating over-dosing.
- ◆ User can select acid or alkali addition.
- ◆ Password protection, so only qualified users can change set-up or calibration.
- ◆ Good laboratory practices (GLP) function brings analytical Q.A. to the hydroponics farmer. Instant recall of current calibration and system set-up information.
- ◆ 24 Hour calendar clock

- ◆ maximum reliability.
- ◆ User can choose readout in mS/cm, CF units, dS/M or ppM (TDS).

- ◆ (optional).
- ◆ Emergency shutoff timer shuts off Conductivity and pH pumps if they operate continuously for user-set time.
- ◆ Operates off a single AC/DC power supply. No electrical installation required.

Specifications

pH

Ranges : 2.0 to 12.0 pH
2.00 to 12.00 pH*

Resolutions: 0.1 pH
0.01 pH*

Accuracy : +/-0.01pH

Conductivity

Ranges : 0 to 9.9 mS/cm
0 to 9.99 mS/cm*
0 to 99 CF
0 to 99.9 CF*
0 to 9.9 dS/m
0 to 9.99 dS/m*

Resolutions: 0.1 mS/cm
0.01 mS/cm*
1 CF
0.1 CF*
0.1 dS/m
0.01 dS/m*

Accuracy : +/-0.5% of full scale

TDS

Ranges : 0 to 9.9 ppK
0 to 9.99 ppK*

Resolution : 0.1 ppK
0.01 ppK*

Accuracy : +/-1.0% of full scale

Temperature

Range : -10.0 to 120.0 °C

Resolution : 0.1 °C

Accuracy : +/-0.2 °C

Temperature Compensation

Automatic Temperature Compensation for Conductivity, TDS and pH. Uses temperature sensor built into Conductivity sensor

Calibration

Automatic calibration for all parameters, with automatic standards

Good Laboratory Practices

All calibration information and user-adjustable set-up information is stored in memory, and can be recalled on the display at any time. This information can also be printed or downloaded to a computer, when the optional Plus Pack is fitted.

The unit's serial number is stored in memory. This is displayed at turn-on, and included with GLP information.

Plus-Pack Option

The Plus Pack option includes the following items...

- ◆ RS232 Serial Interface for
- ◆ Datalogging capability.
- ◆ 24 Hour Calendar Clock.
- ◆ Selectable High or Low

Datalogging*

Memory

2300 readings, including date and time.

Notepad

Records reading into memory at the touch of a button.

Automatic Datalogging

User selectable for one reading every...

1,2,5,10,15,20 or 30 minutes or every...

1,2,3,4,6,8,12 or 24 hours

RS232 Serial Interface*

300, 9600 and 19200 Baud.

8 Bits, No Parity, 1 Stop Bit,

XON/XOFF Protocol

Calendar Clock*

24 Hour Calendar Clock

(Y2K Compliant)

recognition.

Enclosure

Tough ABS enclosure, fully waterproof to IP65.

Display

80 Character alphanumeric LCD with user-friendly menu system and full-text messages.

Dimensions

210 x 180 x 90 mm

Mass

Full Kit : Approx 3.0kg

Environment

Temperature : 0 to 45 °C

Humidity : 0 to 95% R.H.

***These items applicable when Plus-Pack option is fitted.**

Power

24V DC, 50mA Max for controller.
Up to 150 mA can be supplied out of each 24V DC control output.
AC/DC Adaptor to suit specified country is supplied.

Ordering Information

hydroCHEM Controller....111103

Part No

Kit Includes

4 Terminal Cond Sensor..122215
(also used for temperature)
pH Sensor.....121224
Pump Sensor.....130102
pH6.88 Buffer, 200mL....121306
pH4.00 Buffer, 200mL....121381
2.76mS/cm Conductivity
Standard, 200mL.....122306
AC/DC Power Adaptor....Specify
Country
hydroCHEM Handbook.....130050

Instrument Options

Plus-Pack option.....130100
(includes RS232 cable)

Communication Software
for Windows.....130086

Spares

RS232 Interface Cable...130041

Part No



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[Download the handbook for this instrument.](#)

Hint : Right click on a link, then select "Save Target As..." or "Save Link As..." to save the file to your own computer.

If you do not have Adobe Acrobat in your computer, a free Acrobat Reader can be downloaded by clicking on the following link.



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