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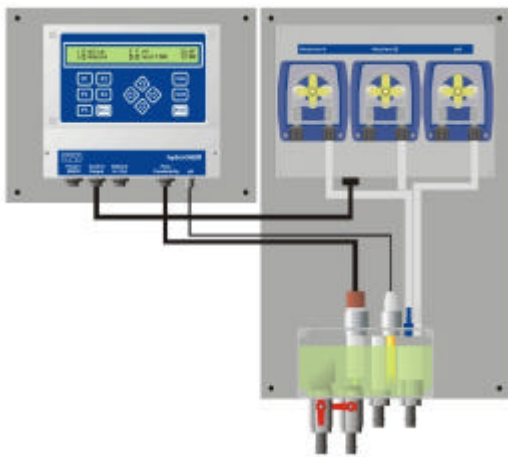
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## hydroCHEM-DS

TPS Australia - Quality hand-made instruments since 1968.

### hydroCHEM-DS Conductivity and pH Dosing System



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- ◆ **Fully configured controller for Conductivity and pH in Hydroponic applications.**
- ◆ **Temperature readout is provided, and optional temperature control output is optionally available. All components are pre-installed onto the single panel. All that the end-user needs to do is cut the tubing to the desired lengths plug it in and turn it on. Low maintenance, reliable peristaltic pumps. Supplied with all fittings and accessories.**
- ◆ **The new advanced design makes this unit far superior and yet cheaper and easier to use than other brands. The hydroCHEM Dosing System is the culmination of over 30 years manufacturing experience.**
- ◆ **The hydroCHEM Dosing System is quite simply the best hydroponics controller available anywhere in the world in its price bracket.**
- ◆ 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 (optional).
- ◆ Emergency shutoff timer shuts off

- ◆ Pre-installed onto mounting panels. No further installation required.
- ◆ Waterproof construction rated to IP65.
- ◆ Highly reliable peristaltic pumps included.
- ◆ Optional output for "C" nutrient pump.
- ◆ Memory for 2300 stored readings, with automatic datalogging facility (optional).
- ◆ RS232 Interface for remote monitoring of system (optional).
- ◆ Flow sensing to ensure system functions correctly.
- ◆ Large digit mode makes the data easy to read in any light or from a distance.
- ◆ Automatic calibration

technology resists fouling for maximum reliability.

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

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 recognition.

### **Enclosure**

Tough ABS enclosure, fully waterproof to IP65.

### **Display**

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

### **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

#### **Peristaltic Pumps**

- ◆ 3 x 6 Litre/ Hour
- ◆ Chemical resistant Santoprene

#### **Power**

24V DC, 300mA Max with both pumps on. AC/DC Adaptor to suit specified country is supplied.

1 panel 470 x 300mm

### Mass

Full Kit : Approx 8.0kg

### Environment

Temperature : 0 to 45 °C  
Humidity : 0 to 95% R.H.

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

## Ordering Information

Part No  
hydroCHEM-DS Dosing.....111109  
System with peristaltic pumps,  
sample chamber and mounting  
panel

### Kit Includes

hydroCHEM Controller....111103  
Dosing Panel with 3.....116320  
pumps and sample chamber  
4 Terminal Cond Sensor..122205  
(also used for temperature  
and flow detection)  
Gel-filled pH Sensor....121227  
pH6.88 Buffer, 200mL....121306  
pH4.00 Buffer, 200mL....121381  
2.76mS/cm Conductivity  
Standard, 200mL.....122306  
AC/DC Power Adaptor....Specify  
Country  
3 x 2m Input Tubing.....116358  
3 x 2m Output Tubing...116360  
3 feed drum weights....116354  
10m of 13mm Poly Tube...NPH.5  
4 x 13mm Poly Clips....NC13  
hydroCHEM Handbook.....130050

### Instrument Options

Part No  
Plus-Pack option.....130100  
(includes RS232 cable)  
  
Communication Software  
for Windows.....130086

### Spares

RS232 Interface Cable...130041  
Pump Tube Assembly.....116352  
Pump Tube Lubricant,3mL.130103



[Download this Specification Sheet in PDF format.](#)



[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.

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Version 4.0

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hydroCHEM

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Aqua-Cond-pH

WP-81

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