

The Watermark

The Newsletter From

Automated Water & Effluent Ltd

Summer 2013

The C135 is a new highly specified portable conductivity, TDS and temperature instrument with the accuracy of a laboratory instrument. The C135 features a large easy to read alphanumeric display which provides assistance to the user with prompts during various phases of use. The C135 features five selectable scales of 0-20.00 μ S, 0-200.0 μ S 0-2000 μ S 0-20.00 mS and 0-200.0 mS when used with a k = 1.0 graphite cell. The conductivity reading may be displayed as TDS (total dissolved solids) with a user specified factor of between 0.45 & 1.0 the TDS will display as ppm or ppt subject to which conductivity range is selected. The C135 is supplied as a kit with A1003 black epoxy bodied conductivity cell with 900mm long cable & connector, AP1000 stainless steel temperature/auto temperature compensation probe with 900mm cable & connector, C1000 liquid calibration solution ready for use.

The C135 displays temperature using the three wire Pt1000 over the range of -10 to 110oC or 14 oF to 230 oF resolution 0.1o C or 0.1oF. A built-in data logger will store up to 80 readings in its memory and also stores the last calibration date. Battery life is increased

by use of the programmable automatic switch of timed function. The C135 is supplied as a kit with A1003 black epoxy bodied conductivity cell fitted with 900mm long cable and connector, AP1000 stainless steel



temperature / auto temperature compensation probe fitted with 900mm cable and connector, C1000 liquid calibration solution ready for use.

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During the summer we receive enquiries for chemical dosing in remote areas usually hypochlorite on camp sites corrosion inhibitor into feed water to steam engines glass house dosing of reagents for hydroponics to name a few where there is no mains power supply. We are very pleased to offer a solution for these applications in the form of not just one but two 12 VDC powered dosing pumps based on our popular, reliable AT series of red dosing pumps RDP which are. Model AT-BX12VDC 05-05 our basic popular dosing pump with manual

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dual control of the output 0 - 100% or 0 - 20% selectable the output is 0 - 5L/Hr against 5.0 Bar or 0 - 3L/Hr against 10.0 and. Model AT-MR12VDC 05-05 microprocessor pump with external pacing control from a water meter or analog from a 4 - 20 mA control signal, the pump also features batch mode, timer function, ppm proportional dosing and remote on/off or or low chemical level cutout outputs are the same as the AT-BX12VDC. The best feature is the power consumption is only 6.5 watts on either pump.

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Technical Tips

pH Service Engineers Tool Kit

We receive a regular stream of calls for our service engineers to help with pH control systems problems a good number of these are not for our instruments. As we like to help where we can but some international instrument manufacturers make life difficult by making parts which are unique to themselves with the intension of preventing the user or other service companies maintaining the equipment. In some cases it is possible to fit a new electrode system if just the electrodes are special to that manufacturer. In other cases where some electronics have been encapsulated inside the electrodes it is often more cost effective to supply a replacement electrode and controller or transmitter as the future cost of ownership is greatly reduced due to our lower cost of replacement electrodes. For pH and Redox (ORP) control loops using conventional combination electrodes the following maybe of help when you have a problem.

1/ By using our APS2 pH & mV simulator you can check the electrical calibration of the instrument, if the instrument has a BNC connector input simply unplug the electrode and plug in



APS2 pH & mV Simulator

the simulator if the instrument is a panel mounting type with terminals you will need a pH -Ex cable tags to BNC socket. Disconnect the electrode fit the pH -Ex cable and plug in the simulator, you can now inject the correct millivolts output to simulate a healthy electrode Note this is an electrical check and does not eliminate the need to calibrate the electrode in buffer solutions. The APS2 can also be used to check the insulation impedance of the pH-Ex cable with the 250MΩ source resistance switched in.

2/ By using our PH15-K cost effective



PH15 pH, mV & °C Meter Kit

portable pH meter kit the electrode with a BNC connector can be plugged into the pH meter and buffer checked using 4, 7 & 10pH buffers. Hopefully form this you can identify the faulty component. So a pH engineers very basic test kit comprises of :-

Model APS2 pH and mV simulator
pH - Ex cable tags to BNC socket say 2m long To safely get you outside the panel
Model PH15-K portable pH, mV and Temperature meter kit.

PHBS 4, 7 & 10 pH buffer solutions or RBS650 Redox buffer solution all in 250 mL bottles.

REPLACEMENT ELECTRODES, CELLS & BUFFERS

Even if you do not use our bench or portable pH, redox (ORP) or conductivity instruments there is a fair chance we can supply good quality replacement electrodes or conductivity cells which often out last and perform the originals supplied with the instrument.

Our web site awe-ltd.co.uk features a wide range of our electrodes and cells which as you will see is not just limited to laboratory and portable instruments.

9015-3B Epoxy bodied general purpose pH electrode with 3' cable and BNC connector.

9016-3B Epoxy bodied general purpose Redox electrode with 3' cable and BNC connector.

9069-3B Glass bodied general purpose pH electrode with 3' cable and BNC connector.

9065-3B Glass bodied general purpose Redox electrode with 3' cable and BNC connector.

A1003-3B Black epoxy cell k=1.0 fitted ATC with 3' cable and connector TBA..



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