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smartCHEM-C



请使用翻译作用于这页底部以翻译页对汉语。

TPS Australia - Quality hand-made instruments since 1968.

smartCHEM-C Laboratory Conductivity - TDS - Resistivity - Temperature Meter



(smartCHEM-pH shown)

[Full Size Image](#)

Simultaneous display of...

- ◆ ***Conductivity, TDS, Resistivity or Ratio***
- ◆ ***Temperature***
- ◆ ***Date & Time***

Automatic Stability Function

PIN Code Access

Programmable "Calibration Due" Alarm

240 x 64 dot graphic display with large digits, full text messages and backlight.

2300 reading memory with Automatic Datalogging.

RS232 computer interface port.

Automatic calibration.

Built-in automatic sensor replatinising facility.

Readout of probe condition for instant troubleshooting.

Fully waterproof design.

The **smartCHEM-C** is no ordinary Conductivity/TDS meter. In addition to the stunning array of features listed below, it also offers Resistivity readout, and a Ratio mode which shows the ratio of two sensors.

The built in sensor replatiniser allows the operator to maintain their sensors without having to return them to the factory.

Datalogging

The **smartCHEM-C** comes with a 2300 reading memory. Readings can be recorded manually, or automatically logged at preset intervals.

RS232 Computer Interface

The capabilities of the **smartCHEM-C** have been expanded with the RS232 port, which is standard equipment (cable sold separately). All readings stored in memory can be downloaded to an RS232 printer or PC. The RS232 port also allows the **smartCHEM-C** to log directly to the printer or PC. [WinTPS](#) Communication software for Windows 3.1 or 95, 98 & ME is available.

Automatic Stability Function (ASF)

ASF adds an extra level of versatility to the **smartCHEM-C**. When ASF is activated, the **smartCHEM-C** monitors all parameters that are currently in use. When ALL parameters become stable, the readings are frozen on the display. ASF is automatically activated with extra fine settings during calibration, to ensure the most accurate possible results for the user.

ASF can also be used during Manual and Automatic Datalogging. When used during Automatic Datalogging, the **smartCHEM-C** will log until a stable end-

A calibration alarm can be programmed to whichever parameters the user chooses. The alarm can be set for Daily, Weekly, 2 Weekly or 4 Weekly. The calibration alarm can also be switched off.

PIN Code Access

The Access Code system is provided for those users who need to ensure the integrity of recorded data, calibration settings and so forth. The Access Code function will prevent anyone who does not know the code from entering the menu system. Keys that are available during normal measurement, (Store, Print, Autolog and F1 to F5) are still available without the Access Code. This means that others are still able to carry out day-to-day work.

Easy to use

The **smartCHEM-C** has a 240 x 64 dot graphic display. It features a user-friendly menu system, making the handbook virtually unnecessary. Full-text help and error messages are provided. All readings and messages are provided in large, bold characters.

Automatic Calibration

Where necessary, the user is able to define the standards to be used for calibration.

Reliability and Service

The **smartCHEM-C** is fully waterproof to IP65, so it is suitable for even the harshest laboratory or factory environments.

TPS has been manufacturing top quality, reliable instruments and electrodes since 1968. The TPS Quality System has been certified in accordance with the AS/NZS ISO 9001 standard. Our service is also of

point is reached for all parameters, then stop logging.

Good Laboratory Practices

To comply with GLP guidelines, the date, time and results of the last calibration are stored in memory, along with the instrument's serial number. This data can be displayed or sent to the RS232 port. All readings stored in memory are stamped with the date and time. Warning of failed calibration is provided.

the highest standard. Spares and accessories are always held in stock, and our modern service facilities ensure a rapid turn-around for maintenance and repair work.

Specifications

Mode	k=0.1 Sensor	k=1.0 Sensor	k=10 Sensor
Conductivity Siemens/cm	0 to 2.000 uS/cm 0 to 20.00 uS/cm 0 to 200.0 uS/cm 0 to 2000 uS/cm 0 to 20.00 mS/cm	0 to 20.00 uS/cm 0 to 200.0 uS/cm 0 to 2000 uS/cm 0 to 20.00 mS/cm 0 to 200.0 mS/cm	0 to 200.0 uS/cm 0 to 2000 uS/cm 0 to 20.00 mS/cm 0 to 200.0 mS/cm 0 to 2000 mS/cm
Conductivity Siemens/metre	0 to 200.0 uS/m 0 to 2000 uS/m 0 to 20.00 mS/m 0 to 200.0 mS/m 0 to 2000 mS/m	0 to 2000 uS/m 0 to 20.00 mS/m 0 to 200.0 mS/m 0 to 2000 mS/m 0 to 20.00 S/m	0 to 20.00 mS/m 0 to 200.0 mS/m 0 to 2000 mS/m 0 to 20.00 S/m 0 to 200.0 S/m
TDS	0 to 1.000 ppM 0 to 10.00 ppM 0 to 100.0 ppM 0 to 1000 ppM 0 to 10.00 ppK	0 to 10.00 ppM 0 to 100.0 ppM 0 to 1000 ppM 0 to 10.00 ppK 0 to 100.0 ppK	0 to 100.0 ppM 0 to 1000 ppM 0 to 10.00 ppK 0 to 100.0 ppK 0 to 1000 ppK
Resistivity	0.50 to 99.99 MΩ.cm 50 to 9999 KΩ.cm 5.0 to 999.9 KΩ.cm 0.50 to 99.99 KΩ.cm 50 to 9999 Ω.cm	50 to 9999 KΩ.cm 5.0 to 999.9 KΩ.cm 0.50 to 99.99 KΩ.cm 50 to 9999 Ω.cm 5.0 to 999.9 Ω.cm	5.0 to 999.9 KΩ.cm 0.50 to 99.99 KΩ.cm 50 to 9999 Ω.cm 5.0 to 999.9 Ω.cm 0.50 to 99.99 Ω.cm
Ratio	0.000 to approx 1.500 1.50 to approx 15.00 (depending on span of sensor)	0.000 to approx 1.500 1.50 to approx 15.00 (depending on span of sensor)	0.000 to approx 1.500 1.50 to approx 15.00 (depending on span of sensor)

Temperature

Range : -10.0 to 120.0 °C
Resolution : 0.1 °C
Accuracy : +/-0.2 °C

Temperature Compensation

Automatic, 0 to 100 °C.
User-selectable ATC coefficient,
0 to -6.0%/°C

Clock

24 Hour Calendar clock.
Displays date, month, year, hours, minutes, seconds.

Good Laboratory Practices

Date, time and value of last successful calibration for each parameter are stored. This information can be recalled or sent to the RS232 port at

Calibration

- ◆ Automatic calibration via Menu system.
- ◆ Any Conductivity, TDS, or Resistivity standard can be entered for calibration.

Conductivity Sensor Span Range

±25% of nominal k factor

Temperature Sensor Offset Range

-10.0 °C to +10.0 °C

Memory

2300 readings including date and time.

Automatic Datalogging

User-set for one reading every 2 to 90 seconds, minutes or hours.

RS232 Serial Port Output

1200, 9600, 19200 and 38400 Baud.
8 Bits, No Parity, 1 Stop Bit, XON/XOFF Protocol

Recorder Output (optional)

Conductivity...: 0 to 2000 mV for all ranges
TDS.....: 0 to 1000 mV for all ranges
Resistivity....: 0 to 2000 mV
Ratio.....: 0 to 1500 mV

Manual range selection or range hold function should be used to maintain logical output.

Output impedance approx 1000 Ohms.
Resolution approx 2 mV.

any time.

Calibration Alarm

Calibration Alarm can be activated for parameter of user's choice. Calibration Alarm can be set to Daily, Weekly, 2 Weekly or 4 Weekly.

Display

240 x 64 dot graphic LCD with large, bold digits, user-friendly menu system and full-text help and error messages.

Enclosure

Tough, high impact ABS. Splash resistant one-piece lid.

Dimensions

240 x 180 x 105 mm

Mass

Instrument only : Approx 0.8 kg
Full Kit : Approx 3.0 kg

Environment

Temperature : 5 to 45 °C
Humidity : 0 to 90% R.H.

Power

12V DC via AC/DC adaptor.
AC/DC adaptor to suit specified country is supplied.

Ordering Information

smartCHEM-C Cond/TDS/ATC/Temp....122105

Kit Includes

k=1.0 Conductivity Sensor.....122230
Temperature/ATC Sensor.....121248
2.76mS/cm Standard, 200mL.....122306
2.00ppK Standard, 200mL.....122307
AC/DC Power Adaptor.....130037
Manual.....130050

Part No

Options and Accessories

Computer Interface:

RS232 Serial Port & cable.....130039
Serial to USB adaptor cable....130087
WinTPS Software for Windows....130086

Recorder:

Recorder Output & cable.....130028

Same Price Interchange Option:
Choose between $k=0.1$, $k=1$ and $k=10$
Range Conductivity Sensors

k=10 Cond/ATC/Temp 1m, glass....122234
k=0.1 Cond/ATC/Temp 1m, glass....122232

Sensor Holder:

Flexible Sensor Holder.....130088



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



[Download the full colour smartCHEM Series Brochure \(1.76 MB PDF\).](#)



[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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Aqua-C

WP-84

90-C

labCHEM-C

smartCHEM-C

microCHEM-Cond

miniCHEM-Cond

proCHEM-C

microCHEM-Salinity

miniCHEM-Salinity

proCHEM-S

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