



# Quality. Service. Value.

[Add this page to the Navigation view to display hyperlinks here]

[Add this page to the navigation structure to display a page banner here]



请使用翻译作用于这页底部以翻译页对汉语。

TPS Australia - Quality instruments since 1968.

## WP-81 Waterproof Conductivity/TDS-pH/mV- Temperature Meter



[Full Size Image](#)

- ◆ ***Rugged and Waterproof***
- ◆ ***User-friendly***
- ◆ ***Calendar Clock***
- ◆ ***Good Laboratory Practices***
- ◆ ***2400 Reading Notepad***
- ◆ ***Automatic Datalogging***
- ◆ ***RS232 Serial Port Interface***
- ◆ ***Multiple Power Options***
- ◆ ***Australian Made***

The WP series enclosure is fully waterproof to IP67 rating. The connectors are rated to IP65. The case, keypad and connectors are designed for maximum durability in the harshest conditions. The WP Series is equally at home in laboratory, field or industrial

Program the AutoLog function to automatically log readings into memory. Simply set the logging interval from 1 minute to 24 hours, start logging and

from laboratory, field or industrial environments.

The 32 character alphanumeric display features a user-friendly menu system. This guides the user through every step of operation. Full text prompting and error messages are provided. Calibration and set-up are a breeze with the WP Series.

The Calendar Clock can be displayed continuously along with the data. The date and time are recorded with every reading, when using the Notepad and AutoLog functions.

To comply with Good Laboratory Practices (GLP) standards, the WP Series store the date, time and results of the last calibration. This information can be recalled when required. All readings stored in memory are stamped with the date and time.

To reduce errors when recording readings, the WP Series has a 2400 reading Notepad. At the touch of a button, readings can be recorded into memory, along with the date and time. This is especially useful when taking readings in wet environments.

walk away. The WP Series can log up to 2400 readings, along with the date and time.

The WP Series has RS232 serial port interface. All readings stored in memory and GLP information can be downloaded to a PC or printer. The RS232 serial port also allows the AutoLog function to log directly to a PC or printer. WinTPS Windows software allows the WP Series to communicate with a PC for data download.

The WP Series is supplied with a rechargeable NiMH battery and charger as standard. Chargers for all countries are available. For extended field trips a solar panel, or a charger lead for a car cigarette lighter socket are also available.

The WP Series is proudly designed and manufactured in Australia. Our aim is to provide you with the best quality, service and value for money. The TPS Quality System has been certified in accordance with the AS/NZS ISO 9001 standard. Since 1968, TPS has built a reputation for excellent backup service that is second to none. Compare the list of features with the competition. The WP Series sets a new standard for handheld instruments.

## Specifications

### Conductivity

**Ranges** : 4 ranges with auto range selection

k=0.1 Sensor : 0 to 2.000 uS/cm  
 0 to 20.00 uS/cm  
 0 to 200.0 uS/cm  
 0 to 2000 uS/cm

k=1 Sensor : 0 to 20.00 uS/cm  
 0 to 200.0 uS/cm  
 0 to 2000 uS/cm  
 0 to 20.00 mS/cm

k=10 Sensor : 0 to 200.0 uS/cm  
 0 to 2000 uS/cm  
 0 to 20.00 mS/cm  
 0 to 200.0 mS/cm

### Temperature Compensation

Automatic, 0 to 100 °C.

### Automatic Buffer Recognition

4.00, 6.88, 7.00, 9.23 and 10.06 pH

### Enclosure

Tough, anti-static Luran-S plastic case, waterproof to IP67. Connectors waterproof to IP65. The instrument will float if dropped into water.

Resolution : 0.05% of range  
 Accuracy : 0.2% of full scale of  
 selected range

### **TDS**

**Ranges** : 4 ranges with auto range  
 selection.

k=0.1 Sensor : 0 to 1.000 ppM  
 0 to 10.00 ppM  
 0 to 100.0 ppM  
 0 to 1000 ppM

k=1 Sensor : 0 to 10.00 ppM  
 0 to 100.0 ppM  
 0 to 1000 ppM

k=10 Sensor : 0 to 10.00 ppK  
 0 to 100.0 ppM  
 0 to 1000 ppM  
 0 to 10.00 ppK  
 0 to 100.0 ppK

Resolution : 0.1% of range  
 Accuracy : 0.5% of full scale of  
 selected range

### **pH**

Range : 0 to 14.00 pH  
 Resolution : 0.01 pH  
 Accuracy : +/-0.01pH

### **mV**

Range : 0 to +/-500.0 and  
 0 to +/-1500 mV  
 (auto-ranging)  
 Resolution : 0.15 & 1 mV  
 Accuracy : +/-0.3 & +/-1 mV

### **Temperature**

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

### **Conductivity/TDS Span Range**

75% to 133% of nominal k factor

### **pH Input Impedance**

>3 x 10<sup>12</sup> Ohms

### **pH Asymmetry Range**

-1.00 to +1.00 pH

### **pH Slope Range**

85.0 to 105.0%

### **Display**

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

### **Memory**

2400 readings, including date and time.

### **Automatic Logging**

User-set for one reading every 1 to 90  
 seconds, 1 to 90 minutes or 1 to 24  
 hours.

### **RS232 Serial Port Output**

300, 1200 and 9600 Baud.

8 Bits, No Parity, 1 Stop Bit, XON/XOFF

### **Clock**

24 Hour Calendar Clock

### **Battery Saver Function**

On : Automatically switches  
 off after 5 minutes of  
 no use.  
 Off : Unit remains on for  
 continuous use.

### **Good Laboratory Practices**

Date, time and results of last  
 successful calibration are stored, and  
 can be recalled when required. GLP  
 information can be printed or  
 downloaded to PC when the optional  
 RS232 Interface is fitted. Warning of  
 failed calibration is provided.

### **Power**

6V NiMH Rechargeable battery pack for  
 approx 75 hours operation. Battery  
 charger for country of choice supplied.  
 Battery can be charged from any 12V DC  
 source.

### **Dimensions**

187 x 110 x 51 mm

### **Mass**

Instrument only : Approx 440g

Full Kit : Approx 2.5kg

### **Environment**

Temperature : 0 to 45 °C

Humidity : 0 to 95% R.H.

# Ordering Information

Part No	Part No
WP-81 Cond/TDS-pH/mV-Temp 1m..121132/1	<b>Options and Accessories</b>
WP-81 Cond/TDS-pH/mV-Temp 3m..121132/3	
WP-81 Cond/TDS-pH/mV-Temp 5m..121132/5	
<b>1, 3 &amp; 5 metre Options Include</b>	
<b>1 metre bundle 121132/1:</b>	
pH Sensor, 1m Surface only.....121207	<b>pH Sensor Upgrade: difficult samples such as meat, dairy, slurries...</b>
k=1.0 Cond-ATC-Temp 1m, plastic.122201	pH, Intermediate Junc, 1m....121200/1
pH6.88 Buffer, 200mL.....121306	pH, Intermediate Junc, 3m....121200/3
pH4.00 Buffer, 200mL.....121381	pH, Intermediate Junc, 5m....121200/5
2.76 mS/cm Cond Standard, 200mL.122306	<b>ORP Sensors:</b>
2.0 ppK TDS Standard, 200mL....122307	ORP, Surface only, 1m.....121262
Battery Charger.....130037	ORP, Intermediate Junc, 1m....121267
Manual.....130050	ORP Calibration Solution.....121309
<b>3 metre bundle 121132/3:</b>	<b>Cable Extension:</b>
pH Sensor, 3m Submersible.....111231	Extra cable, per metre.....130040
k=1.0 Cond-ATC-Temp 3m, plastic.122236	<b>Computer Interface:</b>
pH6.88 Buffer, 200mL.....121306	Serial cable for computer.....130041
pH4.00 Buffer, 200mL.....121381	Serial to USB adaptor cable....130087
2.76 mS/cm Cond Standard, 200mL.122306	<b>WinTPS</b> Software for Windows....130086
2.0 ppK TDS Standard, 200mL....122307	<b>Power options:</b>
Battery Charger.....130037	12V Solar Panel.....130012
Manual.....130050	12V Car Cigarette lighter lead.130046
<b>5 metre bundle 121132/5:</b>	12V Clip lead, separate battery.130052
pH Sensor, 5m Submersible.....111224	<b>Carry case:</b>
k=1.0 Cond-ATC-Temp 5m, plastic.122198	Aluminium Carry Case.....130059
pH6.88 Buffer, 200mL.....121306	<b>Same Price Interchange Option:</b>
pH4.00 Buffer, 200mL.....121381	<b>Choose between k=0.1, k=1 and k=10</b>
2.76 mS/cm Cond Standard, 200mL.122306	<b>Range Conductivity Sensors</b>
2.0 ppK TDS Standard, 200mL....122307	
Battery Charger.....130037	
Manual.....130050	
<b>Please click the following links for further details on the TPS range of sensors...</b>	
<a href="#">pH Sensors</a>	
<a href="#">Redox (ORP) Sensors</a>	
	<b>1 metre Plastic (for 1 metre bundle 121132/1)</b>
	k=10 Cond/ATC/Temp 1m,plastic.122221
	k=0.1 Cond/ATC/Temp 1m,plastic.122235
	<b>3 metre Plastic (for 3 metre bundle 121132/3)</b>
	k=10 Cond/ATC/Temp 3m,plastic.122237
	k=0.1 Cond/ATC/Temp 3m,plastic.122238
	<b>5 metre Plastic (for 5 metre bundle 121132/5)</b>
	k=10 Cond/ATC/Temp 5m,plastic.122219
	k=0.1 Cond/ATC/Temp 5m,plastic.122199
	<b>1 metre Glass (for 1 metre bundle 121132/1)</b>
	k=1 Cond/ATC/Temp 1m,glass...122216
	k=1 Cond/ATC/Temp <b>Low Volume</b> .122214
	k=10 Cond/ATC/Temp 1m,glass...122212
	k=0.1 Cond/ATC/Temp 1m,glass...122229

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

 [Download the full colour WP Series Brochure \(1.65 MB PDF\).](#)

 [Download the manual 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.



*TPS reserves the right to change any part of this specification without notice.*

*Version 2.0*

*Copyright © 1999, 2000, 2001 T.P.S. Pty Ltd.*

*[Add this page to the Navigation view to display hyperlinks here]*

Web Author : TPS Pty Ltd  
Copyright © 2002-2010 T.P.S. Pty Ltd  
A.B.N. 30 009 773 371  
Last modified: February 09, 2011

