



# SP341 K-Type Temperature Smart Probe

Test Products International, Inc.



**Uses any K-Type probe with sub-mini connector**

**Connects to smart phone and uses the TPI Smart Probe App or the TPI View app.**

**Perform differential temperature measurements with one instrument**

**Up to 6 SP341 smart probes can connect to a single mobile device (most devices)**

**Auto field calibrate to  $\pm 1^{\circ}\text{C}$  system accuracy in the range of  $-1^{\circ}\text{C}$  to  $49^{\circ}\text{C}$  using field calibrate mode**

**3 Year Limited Warranty**

Use standard K-type thermocouple probes with sub-mini input plug.

GK41M air probe included.

Other probes sold separately.

## Test the TPI Advantage

Visit [www.tpieurope.com](http://www.tpieurope.com)

## TABLE OF CONTENTS

---

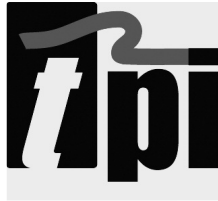
A. Introduction.....	1
B. Safety Considerations.....	1
C. Specifications.....	2
D. Instrument Overview.....	3
E. Maintenance.....	4
F. Trouble Shooting.....	4
G. Accessories.....	4
H. Warranty.....	5
I. Replacing Batteries.....	5

# A. INTRODUCTION

---

1. **Congratulations:** Thank you for purchasing TPI products. The SP341 is easy to use and built to last. It is backed by a 3 year limited warranty.
2. **Product Description:** The SP341 is a K-Type thermocouple thermometer “Smart Probe”. It connects to your mobile device and uses the TPI Smart Probe App or TPI View App to display temperature readings.  
Data can be displayed, saved, logged, allocated to a specific job, exported & e-mailed in either pdf or csv depending on which app the SP341 is connected to.
3. Download either the SmartProbe or the View app from either the Apple App Store or the Google Play Store

SmartProbes App



View App



# B. SAFETY CONSIDERATIONS

---

1. Never attach the SP341 to a hot surface.
2. Always make sure the temperature probe used has the proper range for the application.
3. Always use K-Type thermocouples only.
4. Do not expose the unit to damp environments for extended periods of time.

## C. SPECIFICATIONS

SP341 Smart Probe K-Type Thermometer Specifications	
<b>Input Type</b>	K-Type thermocouple with sub-mini connector
<b>Measurement Range</b>	-58°F to 2462°F (-50°C to 1350°C)
<b>Accuracy</b>	$\pm 3.2^{\circ}\text{F}$ (-58°F to 32°F) $\pm 1.6^{\circ}\text{C}$ (-50°C to 0°C) $\pm(0.3\%$ of reading, + 2°F) ( 32°F to 1000°F) $\pm(0.3\%$ of reading, + 1°C) ( 0°C to 600 °C) $\pm(0.4\%$ of reading, + 2°F) (>1000°F) $\pm(0.4\%$ of reading, + 1°C) (>600°C) Capable of +/-1°F within 30°F to 120°F range when auto field calibration is performed.
<b>Resolution</b>	0.1°F / 0. 1°C
<b>Operating Temperature</b>	-4°F to 122°F (-20°C to 50°C)
<b>Communication</b>	Bluetooth version 4.2 (Use with TPI Smart Probe App)
<b>Battery Type</b>	AAA x 3
<b>Battery Life</b>	75 hours typical

## D. INSTRUMENT OVERVIEW



1. Input connection for K-Type probes. Connector is recessed and polarized (marked + and -). Ensure the K-Type probe is connected properly (see below).
2. SP341 status LED indicator.  
Orange and blinking = Bluetooth not connected  
Green and blinking = Bluetooth connected  
Blinking Red with either of the above = Low battery
3. Power Key. Press and hold to turn the instrument on. Press and hold to turn the instrument off.

4. Built-in magnet. Attach to metal surfaces for hands free operation. Ensure surface is not hot.
5. Serial number location. Last three digits are the product identification number and marked in bold. Use this number to distinguish between models when several SP341's are connected to a phone or tablet.
6. Screw to open battery compartment. Turn the screw counter clockwise until it is just above the compartment door. Lift on the screw to open the compartment.



K-Type probe connectors are polarized and made so one prong is wider than the other. This ensures connection with the proper polarity is made. They are marked + and - just like the SP341 connector.

## E. MAINTENANCE

---

1. Clean the surface of the instrument with a damp cloth.
2. Replace the three AAA batteries when the low battery indicator appears.

## F. TROUBLE SHOOTING

---

<b>Symptom</b>	<b>Probable Cause</b>
<b>Temperature seems inaccurate.</b>	<ul style="list-style-type: none"><li>• Check thermocouple probe for incorrect wiring or open connection.</li><li>• Low battery.</li><li>• Non K-Type probe being used.</li><li>• Ensure connection with phone is working.</li></ul>
<b>SP341 does not turn on.</b>	<ul style="list-style-type: none"><li>• Dead or low batteries.</li><li>• Not holding down power switch until unit turns on.</li><li>• Defective POWER ON switch.</li></ul>
<b>SP341 displays “OPEN”.</b>	<ul style="list-style-type: none"><li>• No probe connected.</li><li>• Temperature probe is bad.</li></ul>
<b>SP341 measures temperature backwards.</b>	<ul style="list-style-type: none"><li>• Thermocouple probe wired backwards.</li><li>• Probe connected with reverse polarity.</li></ul>

## G. ACCESSORIES

### **Included Accessories**

<b><u>Part Number</u></b>	<b><u>Description</u></b>
A341SP	Soft pouch
GK41M	General purpose temperature probe

### **Optional Accessories**

<b><u>Part Number</u></b>	<b><u>Description</u></b>
A925	Carrying case for 4 smart probes
A927	Carrying case for SP341 & temperature probes

**Test Products International offers a variety of K-Type thermocouple probes for many applications. Visit [www.tpieurope.com](http://www.tpieurope.com) for additional information.**

## H. WARRANTY

This product is warranted to the purchaser against defects in material and workmanship for three years from the date of purchase.

**Covered by Warranty:** Repair parts and labor; or replacement of the product at company's option. Normal transportation charges to the purchaser are also covered.

**Not Covered by Warranty:** Damages to the product which are the result of abuse, improper use or maintenance are not covered. Any other expense, consequential damages, incidental damages, or incidental expenses including damages to property are not covered. Transportation expenses to the company are not covered.

**To Obtain Warranty Performance:** Include with the product: your name, address, phone number, written description of the problem and proof of purchase date. Carefully package and return to:

**TPI, Inc.**  
9615 SW Allen Blvd.  
Beaverton, OR 97005  
USA  
503-520-9197  
www.testproductsintl.com

**TPI Canada**  
342 Bronte Rd. S., Unit 6  
Milton, Ontario L9T 5B7  
Canada  
905-693-8558  
www.tpicanada.com

**TPI, Europe Ltd..**  
Longley House, International Drive  
Southgate Crawley  
West Sussex RH10 6AQ England  
44(0) 1293 530196  
www.tpieurope.com

**Implied Warranties:** Any implied warranties including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to three years from date of purchase. To the extent any provision of this warranty is prohibited by federal or state law and cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country.

## I. REPLACING BATTERIES

1. Turn the battery compartment screw counter clockwise until it is just above the compartment door. Lift on the screw to open the compartment.



2. Replace the three AAA batteries.



3. Re-install the battery cover and tighten the screw by turning it clockwise.

**Test Products International, Inc.**

9615 SW Allen Blvd., Ste. 104  
Beaverton, OR 97005  
Tel: 503-520-9197  
[www.testproductsintl.com](http://www.testproductsintl.com)

**Test Products International, Ltd.**

342 Bronte Road South, Unit #6  
Milton Ontario Canada L9T 5B7  
Tel: 905-693-8558  
[www.tpicanada.com](http://www.tpicanada.com)

**Test Products International Europe Ltd.**

Longley House, International Drive  
Southgate, Crawley, West Sussex RH10 6AQ  
Tel.: +44 (0) 1293 530196  
[www.tpieurope.com](http://www.tpieurope.com)