# INSTRUCTION MANUAL

PT100 professional portable temperature probes for Android devices with microUSB OTG port



# **SENECA**®

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#### **GENERAL CONSIDERATIONS**

This chapter provides important recommendations for the use of this Instruction Manual. This document contains information of fundamental importance for the correct and safe use of the instrument. Read this instruction manual carefully to familiarise yourself with the instrument before its use. Keep the manual always handy and refer to it in case of need.

#### WARNINGS

Ĩ	Always use the instrument in the appropriate way and for its intended purpose. Do not use force on components or control elements that may appear jammed. The temperatures indicated for probes/sensors only apply to the measurement range of the sensors.
	The warranty is null and void in the event that the module or devices supplied by SENECA, necessary for correct operation, are improperly used or tampered with and in any case if the instructions contained in this manual are not followed. Do not expose handles and cables to temperatures exceeding 70°C Do not expose handles and cables to temperatures exceeding 70°C.
X	Electrical and electronic waste disposal (applicable in the European Union and other countries with recycling policies). The symbol found on the product or package indicates that the product must be handed over to an authorised collection centre for the disposal of <b>electrical and electronic waste</b> .

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#### MY-PT COMPLETE PROBE VERSIONS (with handpiece)

Code	Description
MY-PT-150-3	Portable transmitter for PT100 with probe L=150 mm D=3 mm
MY-PT-250-2	Portable transmitter for PT100 with probe L=250 mm D=2 mm
MY-PT-150-3R	Portable transmitter for PT100 with probe L=150 mm D=3 mm
MY-PT-KIT	Portable transmitter for PT100 with all three PT probes

#### PT PROBE VERSIONS (accessories without handpiece)

Code	Description
PT-150-3-M12	PT100 class B, D=3 mm, L= 150 mm, rounded tip
PT-250-2-M12	PT100 class B, D=2 mm, L= 250 mm, rounded tip
PT-150-3R-M12	PT100 class B, D=3 mm, L= 150 mm, tapered tip

### GENERAL DETAILS

#### **MY-PT TECHNICAL SPECIFICATIONS**



Type of measurement	Temperature
Probe connector	M12 with rotating steel ring nut
Flashing LED	Connection and transmission with the Android device
Power supply	From the Android device through the microUSB OTG port
Consumption	25 mA
Ambient conditions	-20+50°C (handle)
Interface	microUSB
Precision	0,5% of the measurement + 0.4°C (probe+handpiece assembly)
Stability of temperature measurement	0,01% / K (100 ppm / K)
Measurement range	-30300°C
Response time	15 s
Storage temperature	-30+70°C
Handpiece size	130,5 x 30 x 28 mm
Cable length	1 m
Configuration system	PIV App mobile application, available for download from Google Play Store, for Android smartphone with USB OTG port
Marking	CE
Standards	EN 61326

SENSOR TECHNICAL SPECIFICATIONS		
Thermal element	Pt100 ohm 0°C, precision according to IEC 751, class B	
Insulation	100 M ohm at 100 Vdc	
Electric connection	4-contact moulded Nylon connector with M12x1 metal	
	thread screw connection (DIN-VDE0627)	
Protection rating	IP67	
Construction	High compact mineral insulation (MgO), AISI 316 stainless steel sheath	
Diameter	2 mm or 3 mm (check codes on page 3)	
Length	150 mm or 250 mm (check codes on page 3)	

#### INTENDED PURPOSE

The MY-PT Series is a range of portable transmitters capable of transforming, by means of a dedicated mobile application, **PIV App by SENECA** (\*), Android mobile devices like smartphones or tablets into data acquisition systems. These probes give the possibility of displaying on your device PT100 temperature values in analogue or digital format, and of sharing the data through the most common communication channels, like e-mail, SMS, etc. These probes guarantee professional, certified and industrial measurements, both for diagnostic purposes and for monitoring environmental parameters. The scopes for uses are in connection with:

- Machinery
- Environmental chambers
- Food storage and transport
- Laboratories
- HVAC systems

(\*) the **PIV App by SENECA** can be downloaded free of charge from Google Play Store. In order to download and install the application, and received future updates, access to the Internet and a Google account are required.

> ATTENTION! In order to be able to use MY Series probes the mobile App must be installed on your Android device. The instrument cannot be used without the App.



#### CONNECTING THE PROBE TO THE HANDPIECE

#### INSTRUCTION FOR CONNECTING THE PROBE TO THE HANDPIECE



#### APP INSTALLATION

The dedicated mobile App for the use of Series MY probes can be downloaded from Google Play Store, available in your device menu. In the Google Play Store search field enter **PIV App by SENECA**. Once the App is found, proceed with its installation



## PIV app by SENECA

SENECA s.r.l. Tools

3 PEGI 3

This app is compatible with all of your devices.

#### APP INITIALISATION AND OPERATION

The application installed starts automatically when the connection of a probe through the microUSB port is detected. The App immediately shows the instantaneous value detected, both in analogue and digital format. The centre of the screen shows the function keys, while the bottom provides a quick view of the data collected in real time in chart format.

During operation, the PIV App disables automatic screen lock, so that the measurements can continue to be displayed for the user.

The display will only go off when the screen is manually put in stand-by mode by the user by pressing the stand-by button. However, the App will continue its measurement/datalogging activities. Simply take the device back out of stand-by mode to view the measurements.



Install

APP INITIALISATION AND OPERATION		
II     Image: Constraint of the second	<ol> <li>Toolbar:         <ul> <li>play/pause: detection or datalogger.</li> <li>reset: sampling time,</li> <li>enable/disable: saves the value and shows it as relative on the display, both in analogue and digital format.</li> <li>Capture screen: saves a screen shot in the photo gallery, with the option of exporting or sharing it</li> <li>settings</li> </ul> </li> <li>MIN/AVG/MAX value panel. Real-time chart of the detected value (*).</li> </ol>	
	Using the <b>settings button</b> , it is possible to read the model and the serial number of the probe detected. Below it is possible to configure: • Unit of measure • Datalogger enable/frequency • Measurement scale • Real time measurement log • Alarm thresholds, with and without SMS, with warning sound and/or vibration, recipients from address book or direct entry	
Datalana	The panel of the datalogger sessions gives the possibility of exporting the data in CSV format for processing on spreadsheet, or for loading on an analysis software like	
Datalogger	Easy Log Viewer.	
✓ Spazio totale occupato: 24 KB           ■         0017         02/03/16 10:18 AM         MY-TC           MY-TC - 2016-03-02 11:18:24 (2)	<ul> <li>CSV file format:</li> <li>INDEX: row index, incremental number.</li> <li>TYPE: LOG row type.</li> <li>TIMESTAMP: date and time of the measurement (time and device language settinge)</li> </ul>	

APP INITIALISATION AND OPERATION		
	<ul> <li>&lt;<values>&gt;: shows the main and accessory values depending on the type of probe; the unit of measure is in the column name.</values></li> <li>ALM: this will be 1 or 0, depending on whether at the time of sampling the alarm was enabled or not.</li> </ul> The PIV App gives the possibility of saving the value on SD card (device memory path SENECA/PIVAPP), on a cloud storage space provider like for example Dropbox, or to forward it as an e-mail attachment.	
Image: Non-State State	When the set threshold is exceeded, a flashing icon indicates that an alarm is present, or that the threshold has been exceeded. During this stage, if set to do so, your device will send a notification SMS to the recipients. The device will not send any further SMS until the alarm is "rearmed". Touch icon 1) to scroll the alarm log. The reset key can be used to reset/rearm the alarm function.	

(\*) it is possible to change the values of the scales or the MIN/AVG/MAX values using the settings button.

#### QUESTIONS AND ANSWERS

Technical support:

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support@seneca.it

Product information:

sales@seneca.it

For more information, visit the dedicated area of our website <u>www.seneca.it/products/my-pt</u> or call 049 8705359.

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