

INSTRUCTION MANUAL

MY-TC

Professional portable thermocouple probes
for Android devices with microUSB OTG port



TCK-AC



TCK-250-3



TCK-250-1.5



TCK-W-1000



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MY Series Professional portable temperature probes for Android devices

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



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 if they are not specifically approved to withstand such temperatures.



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 **electrical and electronic waste**.

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MY-PT COMPLETE PROBE VERSIONS (with handpiece)

Code	Description
MY-TC-250-3	Portable handpiece for thermocouple with probes TCK-250-3-M12 and TCK-W-1000-M12
MY-TC-250-1.5	Portable transmitter for thermocouple with probes TCK-250-1.5-M12 and TCK-W-1000-M12
MY-TC-AC	Portable handpiece for thermocouple with probes TCK-AC-M12 and TCK-W-1000-M12
MY-TC-KIT	Portable handpiece for thermocouple with probes TCK-AC-M12,

MY Series Professional portable temperature probes for Android devices

MY-PT COMPLETE PROBE VERSIONS (with handpiece)

TCK-250-3-M12, TCK-250-1.5-M12 and TCK-W-1000-M12

PT PROBE VERSIONS (accessories without handpiece)

Code	Description
TCK-250-3-M12	Thermocouple type K, d=3 mm, L=250 mm, with M12 connector
TCK-250-1.5-M12	Thermocouple type K, d=1.5 mm, L=100 mm, with M12 connector
TCK-W-1000-M12	Thermocouple type K, exposed coupling, L=1000 mm, with M12 connector
TCK-AC-M12	Thermocouple type K, with arc, with M12 connector

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	1% of the measurement + 2°C
Measurement range	0..1,150°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

MY Series Professional portable temperature probes for Android devices

Marking	CE
Standards	EN 61326

SENSOR TECHNICAL SPECIFICATIONS

Thermal element	Single element type K thermocouple according to IEC 584 class 2 (ASTM E230)
Insulation	100 M ohm at 500 Vdc
Electric connection	Compensated male moulded Nylon connector with M12x1 metal thread screw connection (DIN-VDE0627)
Protection rating	IP67
Construction	Compact mineral insulation (MgO) with insulated hot coupling, Inconel 600 sheath
Diameter	1.5 mm or 3 mm (check codes on page 3)
Length	100 / 250 / 1000 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

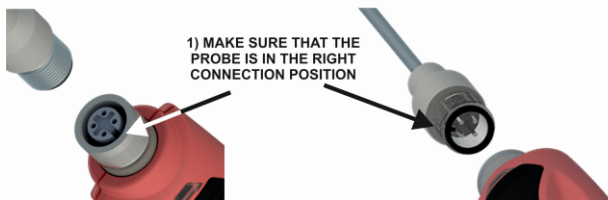
(*) the **PIV App by SENECA** can be downloaded free of charge from Google Play Store. In order to download and install the application, and received future updates, access to the Internet and a Google account are required.

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.

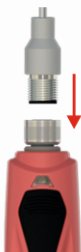


CONNECTING THE PROBE TO THE HANDPIECE

INSTRUCTION FOR CONNECTING THE PROBE TO THE HANDPIECE

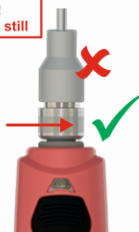


2) INSERT THE PROBE IN THE HANDPIECE M12 CONNECTOR



3) TIGHTEN THE RING NUT ANTICLOCKWISE

WARNING !
Keep the probe still



INSTRUCTION FOR DISCONNECTING THE PROBE FROM THE HANDPIECE

WARNING !
Keep the probe still

1) UNSCREW THE RING NUT CLOCKWISE



2) REMOVE THE PROBE FROM THE HANDPIECE M12 CONNECTOR



MY Series Professional portable temperature probes for Android devices

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. Strumenti

1 PEGI 3

2 L'app è compatibile con alcuni dei tuoi dispositivi.

Aggiungi a lista desideri

Installa

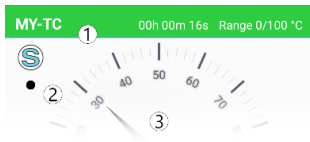


APP INITIALISATION AND OPERATION

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.

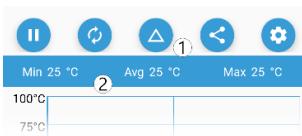
During operation, the PIV App disables automatic screen lock, so that the measurements can continue to be displayed for the user.

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.



- 1) Type of probe; sampling session time; operating range.
- 2) Flashing operation LED:
 - Black = detection;
 - Blue = detection/datalogger.
- 3) Analogue and digital format display(*)

APP INITIALISATION AND OPERATION



1) Toolbar:

- play/pause: detection or datalogger.
- reset: sampling time,
- enable/disable: saves the value and shows it as relative on the display, both in analogue and digital format.
- Capture screen: saves a screen shot in the photo gallery, with the option of exporting or sharing it
- settings

2) MIN/AVG/MAX value panel.

Real-time chart of the detected value (*).



Using the **settings button**, 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.

Datalogger

Spazio totale occupato: 24 KB

0017 02/03/16 10:18 AM MY-TC
MY-TC - 2016-03-02 11:18:24 (2)

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 Easy Log Viewer.

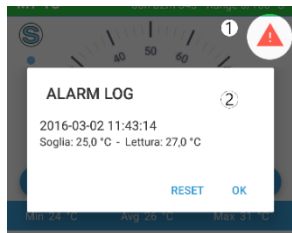
CSV file format:

- INDEX: row index, incremental number.
- TYPE: LOG row type.
- TIMESTAMP: date and time of the measurement (time and device language settings).

APP INITIALISATION AND OPERATION

- <<VALUES>>: shows the main and accessory values depending on the type of probe; the unit of measure is in the column name.
- ALM: this will be 1 or 0, depending on whether at the time of sampling the alarm was enabled or not.

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.



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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Product information:

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For more information, visit the dedicated area of our website <http://www.seneca.it/products/my-tc> or call +39 049 8705359.