

TEMPUS-AG-PR



TEMPUS-AG-PR

Pressure Sensor device 1 Input



USER'S GUIDE

Bluetooth°

INTRODUCTION

The TEMPUS-AG-PR is a sensor device powered by a 9V battery and used only for reading and controlling the pressure of your irrigation system. Thanks to the prewired pressure sensor, the TEMPUS-AG-PR will put the pressure under control and will alert if the tresholds are exceeded. The tresholds can be set from the MyToroTempus application or platform. TEMPUS-AG-PR transmits data via LoRa connection to a TEMPUS-AG-4G/WF gateway.

SPECIFICATION

DIMENSIONS

Width: 10,5 cm Height: 4,8 cm Depth: 11,6 cm

FEATURES

Bluetooth® Smart 4.0 Low Energy LoRa™ radio communication

POWER SUPPLY

9V 6AM6 ou 6LR61 Alkaline battery (not included)

Current consumption : 0.1mA Sensor power supply : 5VDC (TBTS)

USE

Operating temperature: -20°C to 50°C

Indoor and outdoor use

Use in humid environment IP68 (test conditions: 1h at 1m depth)

Altitude use up to 2000m

Poliition level 2

Maximum relative humidity of 80% for temperatures up to 31°C and linear decrease up to 50% of relative humidity at 40°C.

INSTALLATION

1 (S1) Pressure Sensor Pressure: 0 to 16 bars Screw thread: G1/4 EN837

Installing the wrong type of battery may cause an explosion or fire hazard.

INSTALLATION GUIDELINES

The TEMPUS-AG-PR is made for an outdoor use. You can place it in a buried valve box or set it on a wall (concrete, brick, cinder blocks) with 2 dowels and 2 countersunk screws of 4X40 not included.

In order to clean the TEMPUS-AG-PR, use soapy water with a sponge and then a soft cloth to wipe it off.

When replacing the sensor, only use a sensor with a waterproof connector (MIPAG1XX004BAAAX).

APP DOWNLOAD

1. On your smartphone or tablet, go to the «App Store» or to the «Play Store» app





2. Search for «The Toro Company» in the search bar

Developer The Toro Company



3. Once found, download the MyToroTempus App



4. Once installed, activate the Bluetooth® of your smartphone or tablet

CREATE AN ACCOUNT

To use TEMPUS-AG-PR/4G/CT/MS, you need to create your MyToroTempus account.

- 1. Launch MyToroTempus app from your smartphone and/or tablet
- 2. Select the "Registration" button.
- 3. Follow the steps described on the app

Note: if you already have an account on the MyToroTempusAG.com platform, you must use the same credentials

Step 2

ASSOCIATION

- 1. Unscrew the TEMPUS-AG-PR 's cap
- 2. Plug the 9V 6LR61 ou 6AM6 battery and screw the cap
- 3. Sign in with your MyToroTempus account
- $\textbf{4.} \ \mathsf{Launch} \ \mathsf{Tempus} \ \mathsf{AG} \ \mathsf{app} \ \mathsf{from} \ \mathsf{your} \ \mathsf{smartphone} \ \mathsf{and/or} \ \mathsf{tablet}.$
- 5. Click on the «Add a device» button or on the «+» button
- 6. Choose the TEMPUS-AG-PR from the availabe devices list.
- **7.** To finish your TEMPUS-AG-PR pairing, follow the next steps described in the app.

Note: To identify your TEMPUS-AG-PR among the nearby devices, please refer to the «Default name» present on the product label.

Security key: The security key allows to protect your device. You can define it during the step 7 of the ASSOCIATION» or access to further information by clicking on the icon at the top right of your screen.

Step 3

PAIRING WITH TEMPUS-AG-4G/WF

To optimize the LoRa[™] radio connection between the TEMPUS-AG-4G/WF and the TEMPUS-AG-PR device, we advise to install the TEMPUS-AG-PR under 800 meters to the TEMPUS-AG-4G/WF. We also advise to associate all your TEMPUS-AG device near the TEMPUS-AG-4G/WF before installing them.

- 1. On the MyToroTempus mobile App, select your TEMPUS-AG-4G/WF, and enter pairing mode on the information screen. (You must be connected via Bluetooth)
- 2. Select the TEMPUS-AG-PR device previously installed.
- **3.** Click on the top right icon to access to the product's informations.
- 4. Click on «Remote Access».
- 5. Select the TEMPUS-AG-4G/WF you want to pair the device with.
- **6.** Click on the button «Send» \longrightarrow on the bottom of your screen to validate.

Once the pairing finished, you can test the connection between your TEMPUS-AG-4G/WF and your TEMPUS-AG-PR

- 7. Go back to «Remote access» screen.
- **8.** Click on the button 🔷 to start the test.

Note:

- The message «Connection established» means that the connection is reliable.
- The message «No connection established» means that it is necessary to bring the TEMPUS-AG-PR closer to the TEMPUS-AG-4G/WF or viceversa.

SENSOR INSTALLATION

- 1. Get closer than 10 meters from TEMPUS-AG-PR and make sure your smartphone's Bluetooth is turned on.
- 2. Launch MyToroTempus app from your smartphone or tablet.
- 3. Select the TEMPUS-AG-PR previously installed. (The two devices, smartphone and PR device, must be connected via Bluetooth)
- 4. Click on "Add a sensor"
- **5.** Select the type of sensor you want connect to your TEMPUS-AG-PR.
- 6. Select the sensor you want connect to your TEMPUS-AG-PR.
- 7. To properly connect the wiring and complete the sensor installation, follow the next steps described in the app.





一十 分 Données 5 V

1 input model: analog 0-5 V Pressure Sensor.

Red wires: 5V power supply

The sensor's wires are directly wired to the products at the factory. Only the sensor can be disconnected thanks to its waterproof Metripack-150 connector.

Metripack-150 connector



The sensor used makes it possible to measure the pressure of the irrigation system from 0 to 16 bars. It will be installed on the system thanks to its $6\,1/4\,EN837$ screw thread.

GENERAL INFORMATION



.⊙Ra This symbol indicates that the product uses a LoRa[™]technology radio.



The symbol «CE» indicates that this device complies with the European standards on safety, health, environment and user protection. Devices with the symbol «CE» are intended for sale in Europe.



This symbol indicates that these types of electrical and electronic equipment must be disposed of separately in European countries. Do not dispose of this device with your household waste. Please use the collection and recycling points available in your country when you no longer need this device.



In case of contrary use to the indications given in this user manual, the device protection may be compromised.



This symbol indicates that the product is shock resistant.



This symbol indicates that the product is resistant to ultra violet.



This symbol indicates that the product is waterproof.



This symbol indicates that the supply voltage is a direct voltage.

FCC/IC STATEMENT TEMPUS-AG-PR

This product contain a modular approval with FCC ID : YWW-BLEMOD, T9JRN2903 and IC : 9319A-BLEMOD, 6514A-RN2903

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: this equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful inteference to radio or television reception which can be determined by tunning the equipment off and on the user is encouraged to try to correct interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with innovation, science and Economic development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/recepteur exempt de license contenu dans le présent appareil est conforme aux CNR d'innovation, Science et Dévelopement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux condtions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est suceptible d'en compromettre le fonctionnement.

This device complies with FCC and ISED RF radiation exposure limits set forth for general population. This device must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Le present appareil est conforme aux niveaux limites d'exigences d'exposition RF aux personnes définies par ISDE. L'appareil doit être installé afin d'offrir une distance de séparation d'au moins 20cm avec les personnes et ne doit pas être installé à proximité ou être utilisé en conjonction avec une autre antenne ou un autre émetteur

TEMPUS-AG-PR
1 Sensor Input

