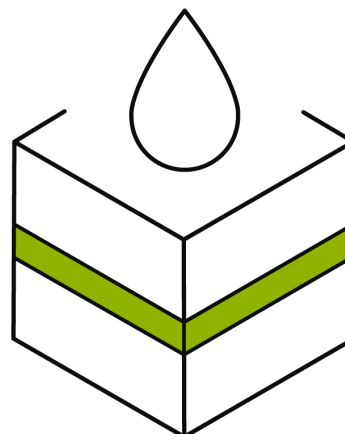


# Irrigation Basic Package



Aranet Horticulture Packages offers a comprehensive, ready-to-use wireless sensor solution tailored for horticultural applications. This package includes the Aranet base station and a selection of wireless sensors designed to monitor key environmental parameters in greenhouses or outdoor cultivation settings. It comes pre-configured, ready to use, and includes 6 months of free Aranet Cloud PRO service.

## Product numbers

Product number	Radio band	To be used in
TDSPHP03	EU868	European Union
TDSPHPU3	US920	United States of America, Canada, South America, Australia, New Zealand
Not available	AS923	BRN, KHM, HKG, IDN, LAO, TWN, THA, VNM, MYS, SGP
Not available	JP923	Japan
Not available	KR923	South Korea

## Package contains

Product number	Quantity	Product name
TDSB0B*3	1	PRO Plus LTE base station
TDAP0E*3	1	PoE injector for base station power supply
TDSPSM*2.050	4	Soil moisture sensor
TDSPHW*2.004	2	Soil sensor (WET150)
TDSPT8*2	2	T/RH IP67 sensor
TDSPT5*9	1	T/RH sensor with radiation shield

- Package is pre-configured and ready for use, with sensors paired to the base station and labeled for easy identification. Package also includes 6 months of free *Aranet Cloud PRO service*, redeemable via email to Aranet sales support ([sales\\_support@aranet.com](mailto:sales_support@aranet.com)).
- Product number designations include the symbol “\*” to signify multiple product numbers, which, depending on the region of use, have either 0 or U in place of the asterisk. Refer to the relevant product datasheets for more information.

## Pre-configuration settings

### Sensor pre-configuration

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Sensor measurement interval	1 min
Sensor labeling pattern	<type> <number>, e.g. <i>T/RH 1</i> , <i>T/RH 2</i> , <i>VWC 1</i>

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- Sensors are labeled both physically, with tags on the devices themselves, and digitally, with matching names configured in the base station.

### Base station pre-configuration

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Wi-Fi network settings	Access point mode (for configuration using the WebGUI)
Ethernet network settings	Enabled, with DHCP
Mobile LTE network settings	Disabled, no SIM card inserted
Defined users	Default root user only

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- To access the base station configuration WebGUI, use the Wi-Fi access point mode with the login credentials (root user password) provided on the base station label. For enhanced security, it is strongly recommended to change the default login credentials during the initial setup.
- To enable LTE network connectivity, insert the SIM card and access the WebGUI to activate the LTE network and to enter the required credentials as provided by your mobile network operator.
- If you wish to adjust these pre-configured settings, please refer to the base station user guide. It provides instructions on changing base station settings such as re-pairing sensors to optimize battery life through longer measurement intervals or updating network settings.

## Use case

Controlling the level of irrigation is critical for growing healthy, high-quality plants. This package includes sensors designed for horticulture applications.



### Irrigation management to ensure water and nutrient availability

- **Optimize irrigation practices.** Ensure that plants receive the right amount of water at the right time.
- **Nutrient balance.** By monitoring bulk and pore electrical conductivity, horticulturists can ensure that plants receive the right amount of nutrients, avoiding under-fertilization or salt build-up that can stress plants.
- **Optimized fertilizer use.** Regular electrical conductivity measurements allow for precise adjustments to the nutrient solution, reducing fertilizer waste and promoting sustainable growing practices.

### Humidity monitoring: enhancing water management

- **Plant health.** Plants lose water through transpiration, a process directly influenced by ambient humidity. By monitoring humidity levels, growers can ensure that plants have enough water for photosynthesis without overwatering, which can lead to root disease.
- **Disease prevention.** High humidity can foster fungal diseases.

### Measure temperature for optimal growth

- **Optimal temperature conditions.** Monitoring temperature ensures that the greenhouse remains within optimal ranges for each crop. High temperatures can stress plants, while low temperatures may slow growth. Detect hotspots and identify uneven ventilation to promote healthy plant growth.
- **Energy use.** Automated systems that adjust heating and cooling based on real-time temperature data can save energy and reduce operational costs, providing a more sustainable solution for horticultural operations.

### Benefits of using the Aranet ecosystem

- All your data in one platform—available anytime, anywhere.
- Easy to add any other Aranet PRO series sensor or use Aranet transmitters to gain data from third-party sensors for the Aranet platform.
- Integrated with third-party control systems using MQTT, Modbus TCP/IP, and BACnet IP protocols, or use the Cloud API to integrate with any web- or cloud-based IT system.