

# RSSI Sensor

Assess the Received Signal Strength Indicator (RSSI) of the Aranet ISM band radio by surveying potential installation sites for Aranet sensors to ensure optimal wireless connection quality.



## Product numbers

Product number	Radio band	To be used in
TDSPTT02	EU868	European Union
TDSPTTU2	US920	United States of America, Canada, South America
TDSPTTU2	AS923	Brunei, Cambodia, Hong Kong, Indonesia, Laos, Taiwan, Thailand, Vietnam
Not available	JP923	Japan, Malaysia, Singapore
Not available	KR923	South Korea

## Signal strength measurement performance

Minimum detectable value	-130 dBm
Resolution	1 dBm

## General specifications

Ingress protection rating	IP42	
Operating temperature	-40–60 °C	-40–140 °F
Dimensions	∅35×120 mm	∅1.4×4.7 in
Weight (incl. battery)	69 g	2.1 oz
Enclosure material	ASA plastic	
Power supply	1 pc AA battery	
Packaging includes	1 pc AA alkaline battery, polyester string for hanging the device	

## Aranet radio parameters

Line of sight range	3 km	1.9 mi
Transmitter power	14 dBm	25 mW
Data transmission interval	1, 2, 5 or 10 min	
Data protection	XXTEA encryption	

## Aranet radio bands and channels

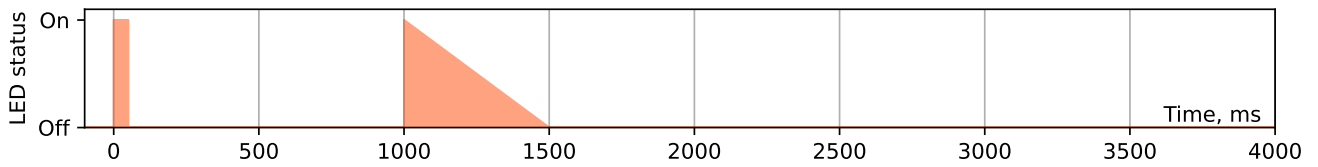
Radio band	Channel 1	Channel 2	Channel 3	Channel 4
EU868	868.1 MHz	868.3 MHz	868.5 MHz	—
US920	917.3 and 922.9 MHz	917.5 and 923.1 MHz	917.7 and 923.3 MHz	917.9 and 923.5 MHz
AS923	923.1 MHz	923.3 MHz	—	—
JP923	923.0 MHz	923.4 MHz	—	—
KR923	923.1 MHz	923.3 MHz	—	—

- This table outlines the radio channels utilized by Aranet Sub-GHz radio technology for transmitting sensor data to the base station, complying with the legislation in various regions. To determine availability of this product in your region and the corresponding channels used, refer to the “Product numbers” table located at the beginning of this document.

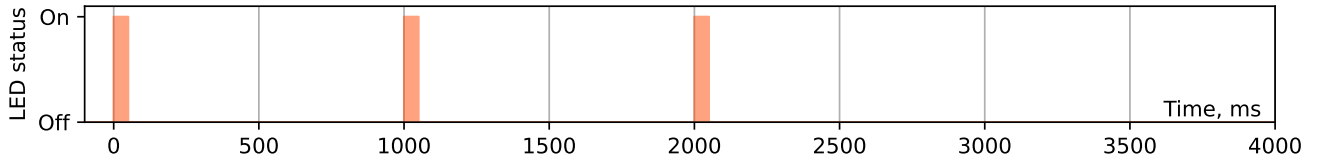
## Pairing process description

As part of the Aranet PRO product series, this device enables wireless sensor reading transmission to the Aranet PRO and PRO Plus base station. Here’s how to pair the sensor with the base station:

- Place the sensor within 20 m (60 ft) of the base station during pairing. Once paired, it can communicate over a much greater distance (up to 3 km / 1.9 mi line of sight).
- If the sensor uses a power supply unit, unplug it. Open the sensor casing and remove the battery for at least 20 seconds. Alternatively (for newer hardware revisions), locate the PAIRING button on the sensor PCB which can be used to initiate pairing without the removal of battery.
- Access the SENSORS menu in the base station Web GUI. Set the measurement interval and select PAIR SENSOR to start the pairing process.
- Within a 2-minute window, insert the battery or press the PAIRING button on the sensor PCB (for newer hardware revisions) to initiate pairing.
- A successful pairing is indicated by the sensor appearing in the Web GUI and a specific LED blink sequence on the sensor PCB (one to three short blinks followed by a longer fade-out blink of the LED):



- If pairing fails, the sensor won't appear in the Web GUI, and the LED blink sequence will consist only of three short blinks. In this case, repeat the procedure closer to the base station.



- After successful pairing, customize parameters like name and tags in the Web GUI. Close the sensor casing and install it in the desired location.

## Compliance information



Conformité Européenne



Federal Communications Commission (USA)



Innovation, Science and Economic Development Canada