

Aranet 4-20 mA transmitter with 24 VDC power supply

Battery-powered and energy-efficient solution designed to integrate with any 3rd party sensor



Aranet 0-10 V transmitter with 24 VDC power supply

Battery-powered and energy-efficient solution designed to integrate with any 3rd party sensor



Measures analog signal of a 3 rd party sensor,				TDSCT202 (EU)	
Aranet 0-10 V transmitter with 24 VDC power supply					
Measures analog signal of a 3 rd party sensor,				TDSVT202 (EU)	
Sensor performance			Sensor performance		
Range	0 – 30 mA		Range	-32 to +32 VDC	
Resolution	0.01 mA		Resolution	0.01 V	
Accuracy ¹	± 5 %		Accuracy ¹	±5%	
Output voltage	24 VDC		Output voltage	24 VDC	
Output voltage tolerance	± 0.6 VDC		Output voltage tolerance	± 0.6 VDC	
Max output power	2.8 W		Max output power	2.8 W	
Radio parameters			Radio parameters		
Line of sight range	3 km (1.9 mi)		Line of sight range	3 km (1.9 mi)	
Supported ISM bands	EU868, RU869 US920, AS923		Supported ISM bands	EU868, RU869 US920, AS923	
Transmitter power	14 dBm		Transmitter power	14 dBm	
Data transmission interval	1, 2, 5 or 10 minutes		Data transmission interval	1, 2, 5 or 10 minutes	
Data protection	XXTEA encryption		Data protection	XXTEA encryption	
General			General		
Ingress protection rating	IP67		Ingress protection rating	IP67	
Operating temperature range ²	-30 °C to 85 °C (-22 °F to 185 °F)		Operating temperature range ²	-30 °C to 85 °C (-22 °F to 185 °F)	
Dimensions	160 x 132 x 46 mm (6.3 x 5.2 x 1.8 in)		Dimensions	160 x 132 x 46 mm (6.3 x 5.2 x 1.8 in)	
Weight	250 g (8.8 oz)		Weight	250 g (8.8 oz)	
Enclosure material	Polycarbonate		Enclosure material	Polycarbonate	
Included in the box	1 AA alkaline battery		Included in the box	1 AA alkaline battery	

Power				
Input voltage		85 – 265 VAC		
Frequency range		47 – 63 Hz		
Max power consumption		10 W		
Compliance				
CE	Conformité Européenne			
IC	Innovation, Science and Economic Development Canada			
FCC	Federal Communications Commission (USA)			

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¹ 95 % of the sensors measure within these typical limits in equilibrium state at the time of sale. ² If battery used, operating temperature range narrows according to battery type. For alkaline battery the range is -20 °C to 50 °C (-4 °F to 122 °F).



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Aranet transmitters with power supply user guide

Discover what type of transmitters there are, and how to connect and pair them with the base station.



About the transmitters

Aranet offers four different transmitters that can be connected with third-party sensors and thus integrated into the Aranet ecosystem. Transmitters themselves are battery-powered, but can also be connected to mains electricity to power the third-party sensor.



Visual 1: Aranet transmitter

- Aranet 4 20 mA transmitter with 12 VDC power supply (datasheet)
- Aranet 4 20 mA transmitter with 24 VDC power supply (datasheet)
- Aranet 0 10 V transmitter with 12 VDC power supply (datasheet)
- Aranet 0 10 V transmitter with 24 VDC power supply (datasheet)

Pairing the transmitter with the base station

Things to know before starting the pairing procedure:

- It is possible to pair the transmitter to the base station with or without the sensor connected.
- To pair the transmitter, the transmitter must be near the base station (max 20 m).
- When installing and placing the sensor note that the cable must be routed in a manner to obtain a "water/drip loop" for water to drop off. Do not stress the cable.
- If you experience any difficulties, get in touch with <u>support@aranet.com</u>.

Option 1: How to pair the transmitter to the base station with batteries (recommended)

Pairing the sensor with the battery ensures an interrupted signal to the base station during the whole installation process, as well as in case of an electricity outage or sensing element failure.

- 1. Have the transmitter and 1x AA battery ready.
- 2. Unscrew and take off the transmitter's lid.
- 3. Open the Sensorhub application (ensure that you have the latest firmware upgrade).
- 4. Open the section "SENSORS" and there choose the preferable measurement interval.
- 5. Click the "PAIR SENSOR" button on the computer screen and then immediately insert the batteries or insert batteries and click the "PAIRING" button on the transmitter (left corner).
- 6. The sensor will be paired and appear in the category "SENSORS".
- 7. You can finish your sensor setup and screw the lid back.



Option 2: How to pair the transmitter to the base station with mains power, without batteries

- 1. Connect the power cable to the transmitter.
- 2. Unscrew and take off the transmitter's lid.
- 3. Connect it to the power mains.
- 4. Open the Sensorhub application (ensure that you have the latest firmware upgrade).
- 5. Open the section "SENSORS" and there choose the preferable measurement interval.
- 6. Click the "PAIR SENSOR" button on the computer screen and then click the "PAIRING" button on the transmitter (left corner).
- 7. The sensor will be paired and appear in the category "SENSORS".
- 8. You can finish your sensor setup and screw the lid back.

Connection to mains power	Cables
N – Neutral	Blue
L – Live	Brown
GND*	Green/yellow

*The wire should be clipped at the end.



Visual 2: Connecting power cable to the transmitter

Finishing up the installation of the transmitter

If needed, the sensor can be either placed on a clean surface or attached to a wall.

- 1. Unscrew the transparent lid of the transmitter.
- 2. To attach the transmitter to a wall use the 4 mount holes in each corner of the body transmitter.
- 3. Screw the transmitter to the wall.
- 4. Attach the transparent lid back.