

# 4-20 mA Transmitter

Measures analog signal of a 3<sup>rd</sup> party sensor. This device, belonging to the PRO sensor series, includes Aranet Sub-GHz ISM band radio which wirelessly transmits sensor measurements to the Aranet PRO base station.



## Product numbers

European Union	TDSPCL02.010
United States	TDSPCLU2.010
Asia	TDSPCLU2.010

## Electric current measurement performance

Range	0–30 mA
Resolution	0.01 mA
Accuracy	0.5 %

## Probe cable specifications

Length	1 m	3.3 ft
Cable material	Polyvinyl chloride (PVC)	
Operating temperature (flexing)	-5–70 °C	23–158 °F
Operating temperature (fixed)	-40–80 °C	-40–176 °F

## Cable color coding

- The transmitter connection to a 4-20 mA source is unipolar. This means that either of the transmitter wires (brown and white) can be connected to the source ground (GND) or signal (+V) to achieve a positive signal measurement.

## General specifications

Ingress protection rating	IP68	
Maximum operating temperature	-40–60 °C	-40–140 °F
Dimensions	∅35×120 mm	∅1.4×4.7 in
Weight (incl. battery)	100 g	3.5 oz
Enclosure material	ASA plastic	
Packaging includes	1 pc AA alkaline battery, polyester string for hanging the device	

## Battery lifetime

Measurement interval	Alkaline battery lifetime	Lithium battery lifetime
1 min	1.6 years	2.1 years
2 min	3.0 years	4.0 years
5 min	6.0 years	8.6 years
10 min	9.6 years	>10 years

- Battery lifetime data has been obtained by mathematical extrapolation and is provided for descriptive purposes only and is not intended to make or imply any guarantee or warranty.
- Battery lifetime tests and calculations performed assuming device is at 20 °C (68 °F) and using *Fujitsu Premium LR6G07* (alkaline) and *Energizer Ultimate Lithium L91* (lithium) AA batteries as reference.
- The operating temperature range may vary based on the battery type used. Generally, the range for alkaline batteries is between -20–50 °C (-4–122 °F), whereas for lithium batteries, it is -20–60 °C (-40–140 °F).

## 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	

## Compliance information

- CE** Conformité Européenne
- FC** Federal Communications Commission (USA)
- IC** Innovation, Science and Economic Development Canada