

Soil Moisture Sensor

Soil moisture sensor that helps to ensure necessary watering level for optimal plant growth. 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

Probe length	European Union	United States, Asia
1.5 m	TDSPSM02.015	TDSPSMU2.015
5 m	TDSPSM02.050	TDSPSMU2.050
10 m	TDSPSM02.100	TDSPSMU2.100
20 m	TDSPSM02.200	TDSPSMU2.200

Soil moisture measurement performance

Range	0-100 %
Resolution	0.1 %
Accuracy	±15 %

 ^{95 %} of the sensors measure within these typical limits in equilibrium state at the time of sale.

Soil moisture probe specifications

Probe dimensions	170×25×25 mm	6.7×1×1 in
Cable length	1.5/5/10/20 m	4.9 / 16.4 / 33 / 66 ft



General specifications

Ingress protection rating	IP67	
Operating temperature range	2-45 °C	36–113 °F
Operating humidity range	0–100 %	
Dimensions	\emptyset 35×120 mm	∅1.40×4.70 in
Weight (incl. battery)	115 g	4 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	1.7 years	2.3 years
2 min	3.2 years	4.3 years
5 min	6.5 years	9.3 years
10 min	>10 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

C Conformité Européenne

Federal Communications Commission (USA)

IC Innovation, Science and Economic Development Canada