



“Given global challenges as climate change and higher food demand. Food production digitalization is essential, Sigrow lowers the barrier towards it”

Sigrow Soil Pro

Simply all your climate data accurate and accessible.

Unit	Range	Unit	Resolution	Accuracy tolerance
PAR (PPFD)	0 - 2000	umol/m2/s	1	5%
Air Temperature	0 - 50	°C	0.01	1%
Air Humidity	0 - 100	%	0.1	2%
Substrate Water Content (VWC)	0 - 65	VWC	1	3%
Substrate Salinity (EC)	0 - 500	ms/m	1	5%
Substrate Temperature	0 - 50	°C	0.01	5%



Figure 1- May 2017 - Installation at Kwekerij Heemskerk BV

Sampling time	300 seconds
Batteries	2xAA
Batteries life	+3 months
Range	1 Km
Warranty	1 year



Substrate probe

- IP 68: Up to 3-meter water submersion
- Accurate in:
 - Soil (Sand, clay and silt)
 - Coco (Peat and fiber)
 - Rockwool (Grodan® and Cultilene®)
 - Perlite (Grade 2 to grade 3)
- Volumetric Water Content (VWC) using dual frequency domain Sigrow® technique
- Salinity (EC)
- Temperature
- 3-meter cable
 - Allows to bury the probe and install the top part over the canopy
- Calibration per substrate and operation point **to reach 1% accuracy tolerance.**



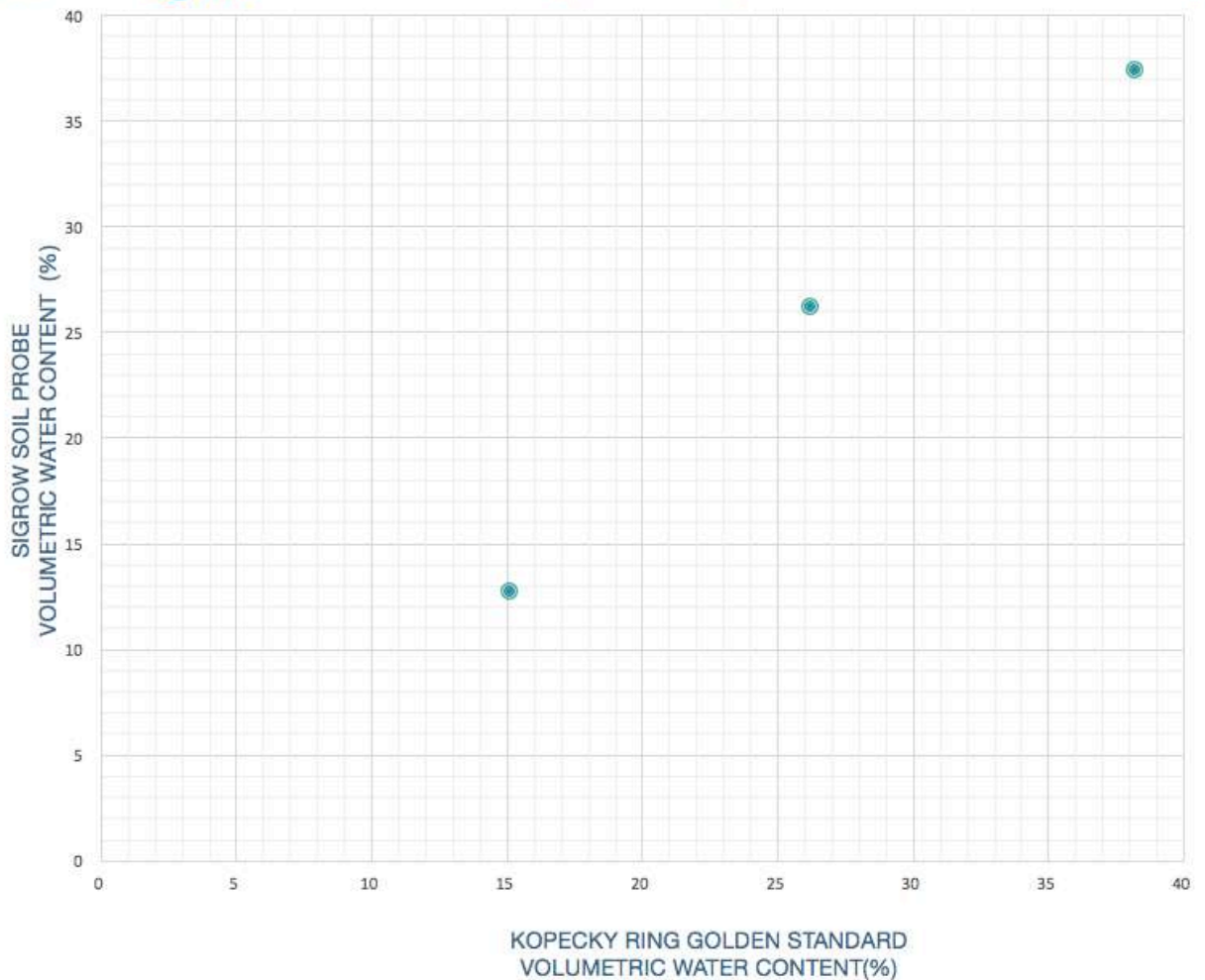
Figure 2 Probe close up - Lower part of the Soil Pro



Volumetric Water Content validation in independent institute



Sigrow Soil Probe Validation by Soil Management Department at Gent University



Volume of influence

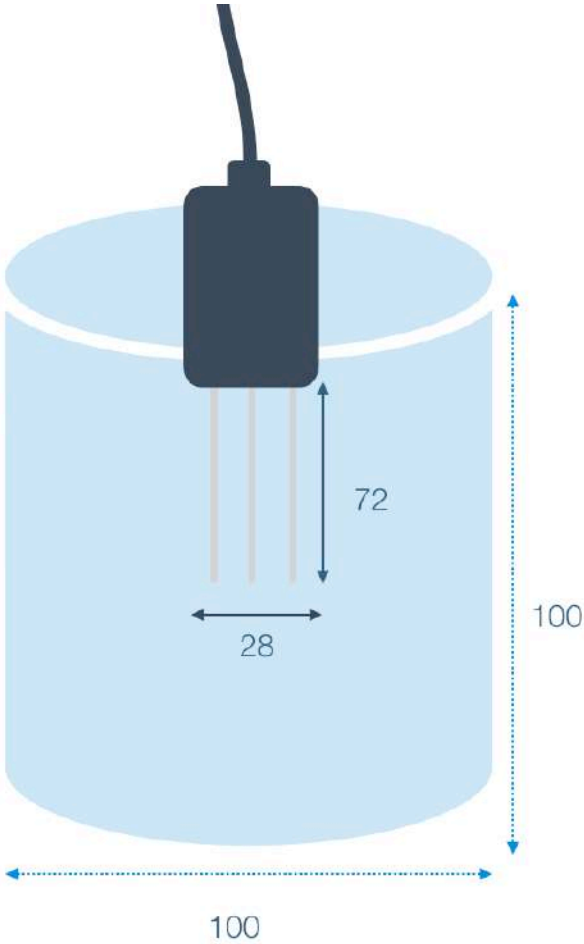


Figure 3 Dimensions of volume of cilinder of influence in mm - The volume of influence is a cilinder of 785 cm



Possible installation

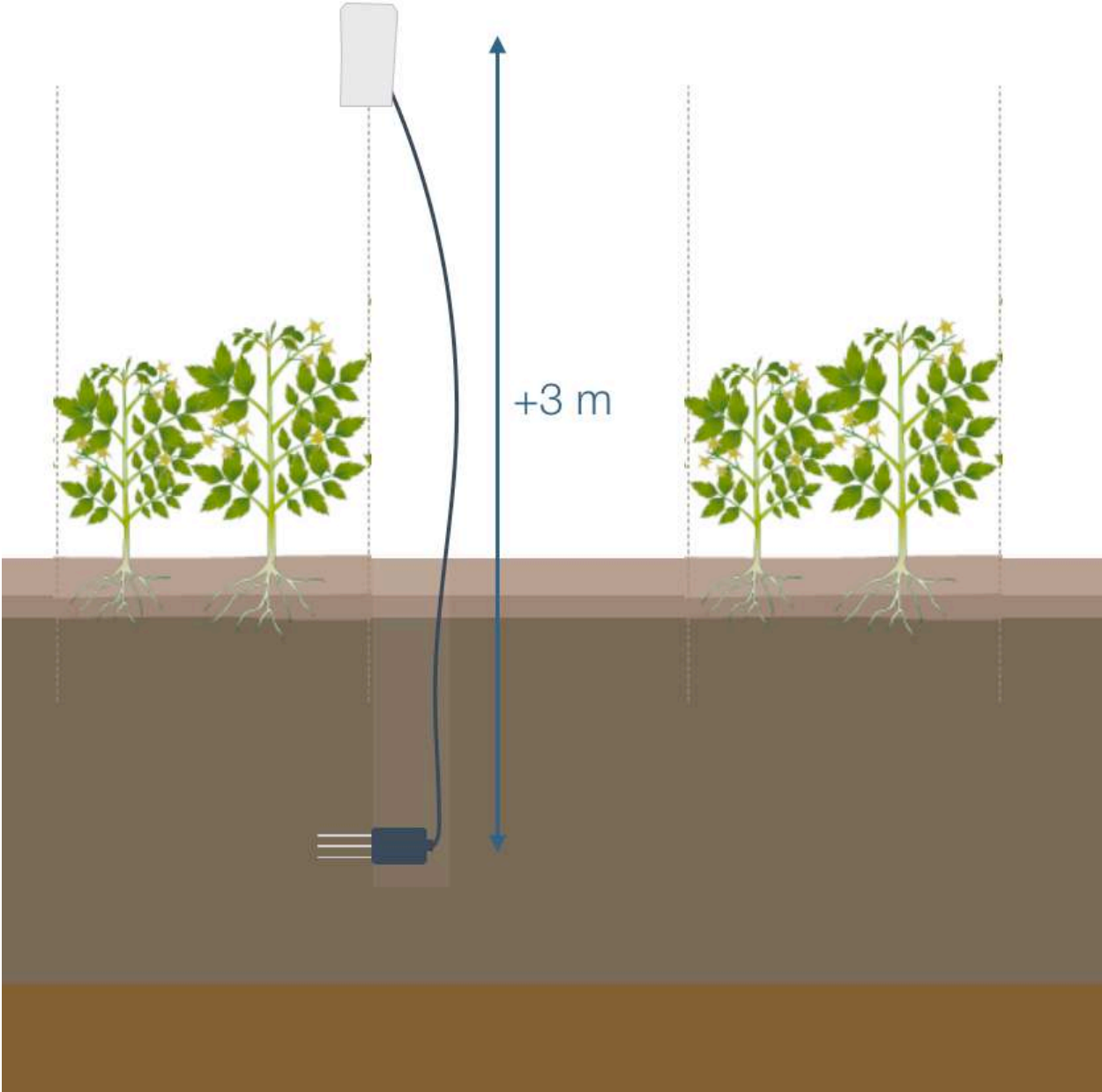
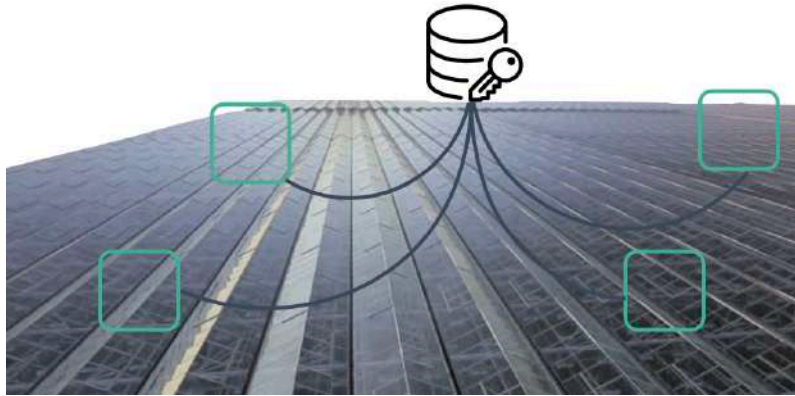


Figure 4 - Since the probe is IP67 it's possible to bury it to measure close to the roots and install the top part of the measuring system on top of the canopy



Sigrow Sensors Family

- ✓ API READY
- ✓ EXCEL COMPATIBLE 
- ✓ SIMPLE, ROBUST



	Air	Air Pro	Soil Pro
Light PAR <i>umol/m2/s</i>	•	•	•
Air Temperature <i>°C / °F</i>	•	•	•
Air Humidity <i>%</i>	•	•	•
Air CO2 <i>ppm</i>		•	
Substrate Volumetric Water Content <i>% / %</i>			•
Substrate EC <i>ms/m</i>			•
Substrate Temperature <i>°C / °F</i>			•





“What is the sampling time of the sensors?”

Five minutes.



“How many sensors can be connected to a central node?”

Unlimited.



“Is there any recurring cost?”

No, access to your data is free of charge.



“What is Sigrow sensor covered range?”

Up to 1km/0,6miles range from sensor to central node.



“How can I access my climate data?”

Your climate data is accessible all the time:

- Sigrow Online Interface.
- With your own custom application: making use of our API.
- Excel, download your data and work locally.



“Do you offer reports or alerts?”

We offer paid services on top of your data to help you make the best decisions at the right time.

