

Soil moisture and temperature probe comparison

Company / technology	Installation		Power			Connectivity				Communication				Ability to measure			Cost (ex GST)	Ongoing subscription costs (ex GST)	Considerations
	Provider	Producer	Solar	Battery	Mains	3G or 4G	Satellite	LoRaWAN	Cat-M1	Alert	Text	Email	Online	Soil moisture	Soil temperature	Salinity			
AKA Primary Solutions Harvest soil moisture and temperature probe	✓	✓	✓	✗	✗	✓	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	Base station \$2,850 Probe \$600 each	System operating fee \$660 per year	Extra features that can be linked to the weather and base station. Some set ups may require a long-range remote if not directly connected to the base station. Long-range remote costs \$825. Installation not included.
Alpha Group Consulting Sentek drill and drop soil probe and rain gauge	✓	✓	✓	✓	✗	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	\$2,600	\$220.00 per year	The probe is available in four lengths – 30 cm, 60 cm, 90 cm and 120 cm with sensors located every 10 cm. Installation not included (location dependant).
Goanna Ag Go Field Soil moisture and temperature probe	✓	✓	✗	✓	✗	✓	✗	✓	✓	✗	✗	✗	✓	✓	✓	✗	\$1,400 per year	None	Provider installed / removed: \$300 ex GST (extra travel costs may apply). Producer installed: installation auger (\$650 ex GST) and removal extractor (\$470 ex GST) can be purchased. Soil probes are not sold outright; they are hired annually.
Integrated Irrigation BushLinx soil moisture and temperature probe	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗	✗	✗	✓	✓	✓	✓	\$2,460 installation included	First year of service fee included in initial set up. \$275 service fee includes all support, sim/data, software.	Soil moisture probes can be an addition to a BushLinx weather station.

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OneTemp HOBO – Soil water potential/ temp sensor (TEROS21)	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗	✓	✗	\$1,628*	Subscription costs associated with additional device required to operate sensor. Subscription to HOBOLink: 30min logging/6hr upload - \$138 OR 1min logging/10min upload - \$418 12-month Telstra network 4G Cat M1 SIM - \$150	*To be operational this sensor requires a HOBO RX3000 remote monitoring station, a HOBOnet wireless manager, and a HOBOnet wireless sensor, OR one HOBO microRX station (all additional costs for sensors). Also provides soil water potential readings.
OneTemp HOBO – Soil moisture/temp sensor (TEROS11)	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗	✗	✗	✓	✓	✓	✗	\$1,316*	Subscription costs associated with additional device required to operate sensor. Subscription to HOBOLink: 30min logging/6hr upload - \$138 OR 1min logging/10min upload - \$418 12-month Telstra network 4G Cat M1 SIM - \$150	*To be operational this sensor requires a HOBO RX3000 remote monitoring station, a HOBOnet wireless manager, and a HOBOnet wireless sensor, OR one HOBO microRX station (all additional costs for sensors).
OneTemp HOBO – Multi depth soil moisture sensor	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗	✗	✗	✓	✓	✗	✗	\$2,240*	Subscription costs associated with additional device required to operate sensor. Subscription to HOBOLink: 30min logging/6hr upload - \$138 OR 1min logging/10min upload - \$418 12-month Telstra network 4G Cat M1 SIM - \$150	*To be operational this sensor requires a HOBO RX3000 remote monitoring station, a HOBOnet wireless manager, and a HOBOnet wireless sensor, OR one HOBO microRX station (all additional costs to sensors).

Comparison table explanation notes

Installation

- Provider – installation is supported by the technology supplier.
- Producer – installation is conducted by the producer.

Power

- Solar – power is supplied through a solar panel and battery.
- Mains – power can be supplied through mains electricity.
- Battery – power is supplied through a battery which the voltage can be monitored and replaced when needed.

Connectivity

- 3G or 4G – the device needs to be situated where 3G or 4G reception can be connected.
- Satellite – the device communicates through satellite connection.
- LoRaWAN – the device communicates through a Long-Range Wide Area Network connection.
- Cat-M1 – low power wide area (LPWAN) technology which transfers low to medium amounts of data.

Communication

- Alert – the technology sends real-time alerts notifying you of an issue.
- Text – the device sends text message updates, usually daily to your mobile phone.
- Email – the device sends updates, usually daily to your email address.
- Online – data can accessed online 24/7.