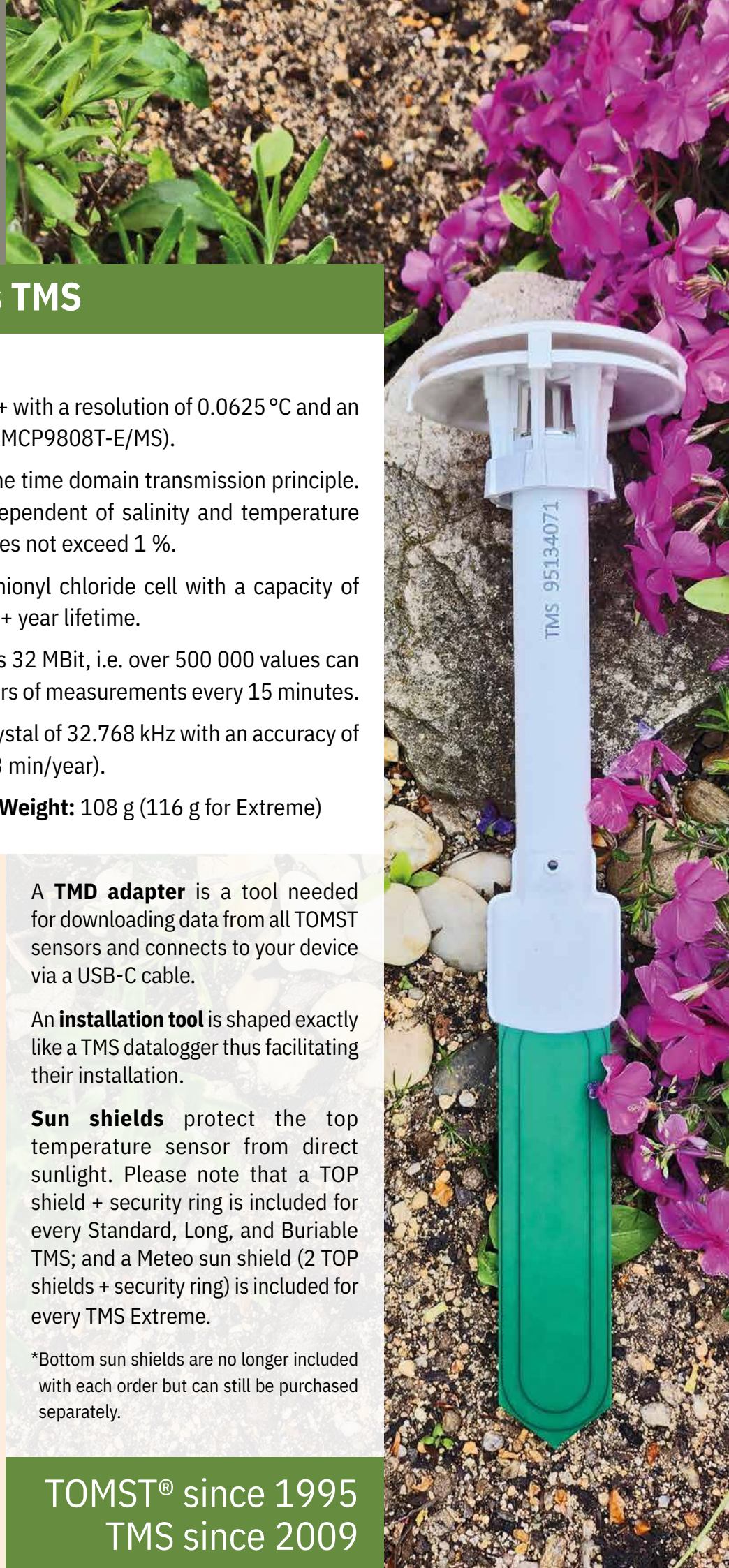
TOMST®

TMS



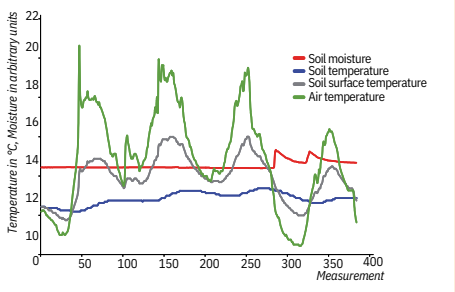
TOMST® Dataloggers TMS

Technical specifications:

1. **Temperature sensors:** DS7505U+ with a resolution of 0.0625 °C and an accuracy of ±0.5 °C (alternatively MCP9808T-E/MS).
2. **Soil moisture sensor:** employs the time domain transmission principle. This method (TDT) is largely independent of salinity and temperature where any measurement error does not exceed 1 %.
3. **Battery:** SAFT primary lithium-thionyl chloride cell with a capacity of 3.6V / 2.6 or 3.5 Ah enabling a 10+ year lifetime.
4. **The capacity** of the dataloggers is 32 MBit, i.e. over 500 000 values can be stored resulting in up to 14 years of measurements every 15 minutes.
5. **Real-time** is measured using a crystal of 32.768 kHz with an accuracy of +/-20 ppm (±20 sec/month, or ±3 min/year).
6. **Length:** 29 cm / **Width:** 32 mm / **Weight:** 108 g (116 g for Extreme)

TMS Accessories

Sample data



A **TMD adapter** is a tool needed for downloading data from all TOMST sensors and connects to your device via a USB-C cable.

An **installation tool** is shaped exactly like a TMS datalogger thus facilitating their installation.

Sun shields protect the top temperature sensor from direct sunlight. Please note that a TOP shield + security ring is included for every Standard, Long, and Buriable TMS; and a Meteo sun shield (2 TOP shields + security ring) is included for every TMS Extreme.

*Bottom sun shields are no longer included with each order but can still be purchased separately.

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TOMST® since 1995
TMS since 2009

TOMST® Dataloggers TMS

TMS Standard

Measures temperature at 3 different levels at a depth of -6, +2, and +15 cm and collects soil moisture data too.

TMS Extreme

The same size as a TMS Standard, it still offers data comparability with added benefits. It has a larger battery capacity (by 30 %) resulting in a prolonged lifetime (approx. 14 years) and a wider temperature range of measurements. It is likewise filled with epoxy to the very top, further improving its durability.

TMS Long

Looking to collect data at larger depths? An extended version of the TMS Extreme, the TMS Long is produced in sizes 20, 30, and 45 cm (length of the tube).

TMS Buriable

Reaching even deeper as well as enabling horizontal data collection, the TMS Buriable is produced in sizes 0.5 m, 1 m, and 2 m (length of the cable extension).

Thermologger

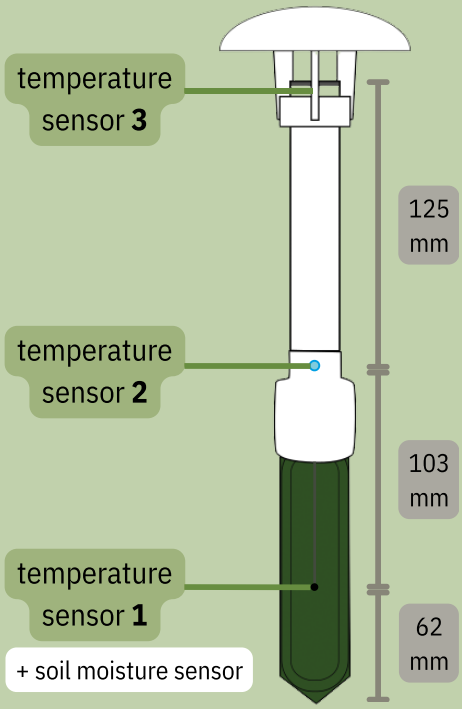
For collecting temperature data only, our Thermologger can be a great fit. With its small size (68 × 22 × 22 mm) and weight (48 g) it is easily placed wherever needed, e.g. buried in the soil, hung/screwed on trees etc. It contains one DS7505U+ or MCP9808T-E/MS temperature sensor.

Point Dendrometer

Based on a potentiometer, the Dendrometer enables precise automatic measurement of stem diameter changes with a resolution of 0.27 µm and also includes one temperature sensor. It was designed for ~ 10 years of autonomous measurement.

TMS

Microclimate dataloggers TMS



HOW TO download data

To download data from any TOMST sensor, plug in the TMD adapter (via a USB-C cable), and open the complimentary Lolly software. Once you attach the top of the sensor to the adapter, data download will start automatically.

Make sure to always update the software before you head out into the field via the *Check for update* button!

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