



METER  
ENVIRONMENT

## TECH NOTE: TEROS 10 VS. GS1

The [TEROS 10](#) sensor is an improved version of our GS1 sensor. We have eliminated cable noise, and the pins are sharper on the TEROS 10 to improve soil contact during installation.

If you'd like to replace your GS1 sensors with TEROS 10 sensors, it will be best to do an updated [custom calibration](#) with the new TEROS 10 sensors, and we always suggest custom calibrations to get the best accuracy out of any soil moisture sensor. Custom calibrations do not take long and only require a scale and oven.

If you do not have the ability to perform a custom soils calibration, we suggest that you update your factory calibration from the GS1 mineral soils calibration to the TEROS 10 mineral soils calibration. Below are the mineral soil factory calibrations for the GS1 and TEROS 10. Please see the [manual](#) for potting soils factory calibrations.

1. **GS1 mineral soils factory calibration:**  $\theta \text{ (m}^3\text{/m}^3\text{)} = 0.000362 * \text{RAW} - 0.554$

2. **TEROS 10 mineral soils factory calibration:**

$$\theta = 1.895 \times 10^{-10} * \text{RAW}^3 - 1.222 \times 10^{-6} * \text{RAW}^2 + 2.855 \times 10^{-3} * \text{RAW} - 2.154$$

If you do not have the ability to change the calibration, the TEROS 10 generally works as a drop-in replacement for the GS1. The TEROS 10 VWC readings will read slightly high at low water contents, and slightly low at high water contents when using the TEROS 10 calibration.