

## 200SS-VA3 Multi-Sensor Adapter

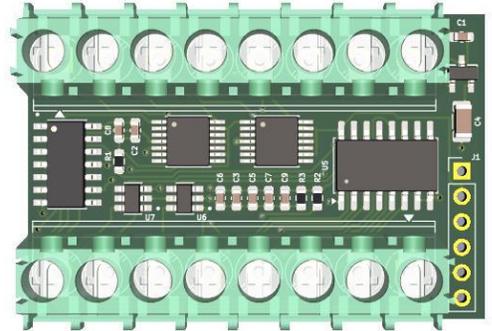
### Overview

The 200SS-VA3 Adapter reads up to three [200SS-WATERMARK](#) soil water potential sensors and one soil temperature sensor for optional temperature compensation. It outputs the readings as 0 to 2.61V analog signals, making the sensors compatible with a wide range of loggers, controllers, and other data acquisition devices.

Internal calibration converts each WATERMARK sensor's resistance value into a voltage output directly proportional to soil water tension in centibars (kPa). When a [200TS soil temperature](#) sensor is connected, the voltage adapter automatically applies temperature compensation for variations within the soil profile. If the soil temperature sensor is not utilized, a default temperature of 75°F/24°C is applied.

The voltage adapter is available in two configurations:

- Standard PCB version with terminal screw connectors
- Fully potted, weatherproof version



### Operation

Watermark Sensor Channel:

The standard range of measurement is 0 to 239 centibars (kPa), represented as a 0 to 2.61 VDC output (approximately 0.0109 volts per centibar), with readings refreshed automatically at regular intervals of ~ 5-minutes.

Temperature Channel (Optional 200TS Sensor):

The temperature input provides a linear output of approximately 0.0109 V per °F (0.0196 V per °C), yielding a measurement range of 21 °F to 132 °F (-6 °C to 56 °C) within a 0 to 2.8 V span.

#### Specifications:

PCB Dimensions: 1.8 x 1.2-inch (45.7 x 30.5 mm)

Terminal Block: 0.2-inch (5 mm) pitch

PCB Weight: 21 grams

#### Power:

INPUT: min: 3.0VDC max: 30VDC

POWER UP TIME: 500 mS

UPDATE RATE: ~ 5 minutes

CURRENT: 1.5 mA

#### Sensor Options:

1 200TS Soil Temperature Sensor

3 200SS-WATERMARK