



PRODUCT



CS506-L

Fuel Moisture Sensor



Remote Measurements

Monitors forest-fire factor; ideal for use with RAWS

Overview

The CS506 is a fuel moisture sensor that measures the moisture content of the 26601 10-hour fuel moisture stick. The 26601 emulates the moisture content of similarly sized twigs on the forest floor. The CS506/26601 combination is used to assess

forest fire fuel and is often incorporated in our prewired or custom fire-weather stations.

Note: The image shows a CS506 fuel moisture sensor attached to a 26601 fuel moisture stick. The 26601 is purchased separately.

Benefits and Features

-) Compatible with most Campbell Scientific data loggers
- Companion product to CS205/107 fuel temperature sensor; can be mounted on the same stake
- Can automatically monitor changing fuel conditions without having to visit the measurement site
- Compatible telemetry options include spread spectrum radios, narrow-band radios, cellular phones, and satellite transmitters

Detailed Description

The CS506 reports the status of small-diameter (10-hour) forest fire fuels as percent moisture by weight (1%=1 g water/100 g dry fuel). It consists of an epoxy-encapsulated electronics package that uses time-domain reflectometry (TDR) technology to measure the moisture content of the 26601 10-

hour Fuel Moisture Stick. The sensor produces a ± 0.7 Vdc square-wave frequency that is read using an analog or pulse channel on a Campbell Scientific data logger. The data logger then converts the frequency measurement to percent fuel moisture via a quadratic calibration.

Specifications

Operating Range 0 to 70% moisture content

Power Supply

5 to 18 Vdc