



S-2 Wireless Sensor with 2 channels of T and %RH, WME and 64K Reading Datalogging Memory quick start guide

Thank you for your purchase of a OmniSense S-2 Wireless 2 channels of T and %RH, WME Sensor with 64K Reading Datalogging Memory. Follow the steps below to install your sensor and view data readings. Pay special attention to setting the clock!



1 Create a new account if you do not already have one

- You will need a monitoring account and a "online" gateway to see live data on your job site
- Refer to "Monitoring quick start guide" for instructions on creating your account

2 Setting Sensor Date and Time

The S-2 sensors are unique in that they are designed to log data with no gateway present. To do this, they need to know the current date and time. Sensors have a real time clock which is battery backed up that maintains the current date and time used to "timestamp" sensor readings. **In order for data to have a proper date and time this clock must be properly set.** To set the sensors date and time:

- Sensors **must be near a gateway that is online and assigned to a job site**
- Switch sensor's power off, wait 5 seconds, then switch power on
- The LED should blink ON quickly for < 1 second indicating sensor is functioning normally
- The LED should then go on for approximately 10 seconds indicating that the sensor has successfully communicated with the gateway after which the sensors date and time will be correct
- Wait up to 5 minutes and then verify sensor readings on the OmniSense Monitoring web site are showing a current date and time



!!If the power is switched off or the battery is removed the sensors date and time have to be set again!!



3 LED

The S-2 has a single LED to communicate two very useful pieces of information:

- When the sensor is switched on the LED should blink ON quickly for < 1 second indicating sensor is functioning normally
- After the initial power on blink the LED should then go on for approximately 10 seconds indicating that the sensor has successfully communicated with the gateway after which the sensors date and time will be correct

Any S-2 sensor can be used to determine if a particular location has gateway coverage by using the LEDs as described above.



4 Connecting Accessories

The S-2 sensors do not require any accessories be plugged in order to function and send "default" data to the server. Any possible combination of accessories is allowed. That said, for the S-2-2 at least one accessory should be connected to get useful data. The S-2-3 has a built in T/RH sensor replacing one of the 3.5mm sockets so supports only one A-1 3.5mm plug in T/RH probe. The WME terminal block can be connected to hammer probes, pin probes, or screws. The S-2 uses a pin type resistance moisture meter and any two wire connection to a material whose conductance varies as a function of moisture content (as in wood, gypsum, OSB or concrete) will work. Pin separation should be about 1.25" but is not critical.

5 Installing sensors

Refer to "Sensor Installation Manual" for installation instructions.

6 Replacing the Battery

Remove the 4 screws that secure the top cover to gain access to the battery. Only use the same battery type which is a ER14505 3.6 Volt AA size lithium Thionyl Chloride battery. A common 1.5 volt alkaline battery will not work. If you install the battery backwards the battery will get hot and be fully discharged in about 60 seconds so best to discard it if that happens.

7 Long Term Storage

It is recommended the sensor be turned off during long term storage otherwise the memory will fill with data. If the memory is full of data it can take a long time to upload the next time the sensor is used. If the sensor is stored for more than a year it is possible that the battery will be "hibernating" and may require several power on/power off cycles before it "wakes up".

8 Viewing sensor data

Refer to "Monitoring quick start guide" for instructions on viewing data through your OmniSense monitoring account.