

## 260-WS-2501 Data Logging Rain Station

The **260-WS-2501 Data Logging Rain Station** is a battery-powered rainfall data collection and recording system consisting of a battery-operated event logger with built-in display and an 8" tipping bucket rain gauge. A 3' tripod with sensor mast and mounting hardware is included.

The **260-2501-A Tipping Bucket Rain Gauge** was designed for the National Weather Service to provide a reliable, low-cost tipping bucket rain sensor. It has been updated and improved with the addition of an inner funnel to even the flow of rainfall into the gauge, providing better accuracy at higher rainfall rates. Its simplicity of design assures trouble-free operation, yet provides accurate rainfall measurements. The tipping bucket mechanism activates a sealed reed switch that produces a contact closure for each 0.01" (0.25 mm) or 1 mm of rainfall. The gauge has an 8" orifice and is manufactured of powdercoated anodized aluminum. The funnel screen prevents debris from entering the gauge.

The **260-2103 Rain Logger** is an event data logger that connects to standard tipping bucket rain gauges to provide detailed rainfall history. The data can be useful in a wide range of fields such as agriculture, forestry, hydrology, and climatology. This compact unit comes in a weatherproof case. It records the date and time of each bucket tip, along with the accumulated hourly, daily, weekly, or monthly totals. Data is stored in nonvolatile EEPROM memory that retains collected data even if the battery fails. The LCD display shows the total accumulated rainfall. Direct USB connectivity provides fast data download.

The **260-2103** runs for up to 1 year on a user-replaceable battery. The 84,650 tip/event capacity can record up to 846" of rainfall between readouts at 0.01" per tip. The real time display will update with each tip of the bucket. For start up and readout, the 260-2103 connects easily to your PC using the 195-BHW-KIT Software Starter Kit. The 195-BHW Software Pro is required only for use with the 195-U-DT-1 U-Shuttle Data Transporter. The starter kit includes the software CD and a 6' USB interface cable. The cable connects to an available USB port on your PC.

### Ordering Information

260-WS-2501 Data Logging Rain Station 0.01"/tip  
 260-WS-2501M Data Logging Rain Station 1mm/tip  
 260-WS-2501M.25 Data Logging Rain Station 0.25mm/tip  
 260-WS-2501M.5 Data Logging Rain Station 0.5mm/tip



260-WS-2501 Data Logging Weather Station

### Specifications

#### 260-2501-A Rain Gauge

Sensor type: Tipping bucket  
 Output: 0.1 second switch closure  
 Switch: Sealed reed switch  
 Sensitivity: 1 tip per 0.01" (.25 mm) or 1 tip per 1 mm  
 Accuracy:  $\pm 2\%$  up to 2"/hr  
 Contact rating: 3 watts, 0.25 amps, 24 Vdc  
 Size: 8" dia x 14-1/2" high  
 Mounting: 3 legs, 1/4" diameter bolt holes on 9-1/2" diameter bolt circle  
 Weight/shipping: 4 lbs/5.5 lbs

#### 260-2103 Rain Logger with Display

Event type: Relay contact closure (rain gauge tip)  
 Event resolution: 0.5 seconds  
 Minimum event duration: 20 microseconds  
 Operating temperature: -4° to +158° F (-20° to +70° C)  
 Timekeeping accuracy:  $\pm 1$  minute per month at 20° C  
 Capacity: 84,650 events (128KB)  
 Download time: 15 seconds  
 Battery: CR-2032 lithium  
 LCD display: LCD is visible from 31° to 122°F (0° to 50°C); the LCD may react slowly or go blank in temperatures outside this range. Waterproof case: Clear ABS, 2.7" x 4.3" x 1.3"

#### Computer System Requirements

>>Windows: Windows 8 and 8.1 (Core, Pro), Windows 7 (Pro, Ultimate and Home Premium), Windows 10 (Home, Pro)  
 >>Windows 7 Enterprise: Please note that, while HOBOWare has been modified to work on Windows 7 Enterprise, there may be local configurations of that operating system that will not work with HOBOWare.  
 >>Mac: OS X Versions 10.9.x, 10.10.x and 10.11.x  
 >>Java Runtime Environment (JRE) 1.7.0\_17 and above (32-bit or 64bit on Windows). Please note that version 1.6, also known as Java 6, is no longer supported. See the time zone note below. >>One of the following Internet browsers: Safari 7 and 8, Microsoft Internet Explorer 10 and 11, as well as the most recent versions of Firefox and Google Chrome.  
 >>Minimum screen resolution of 1024x768. Recommended screen resolution of 1280x800 or greater particularly for non-English users.