

## Group 255 Evaporation Stations

**Group 255 Evaporation Stations** are complete systems used to measure the amount of water lost each day to evaporation. A U.S. National Weather Service Class A Evaporation Pan, 10 inches deep and 47.5 inches in diameter, holds the water. As evaporation occurs, the water level drops and is measured by a hook gauge, or by measuring the amount of water needed to refill the pan to a fixed reference point.

### Hook Gauge Measurement

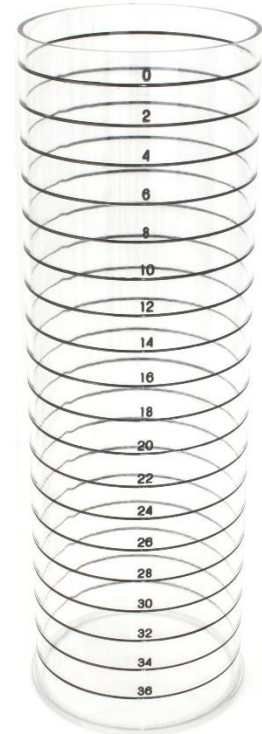
The 255-205 Still Well is placed in the evaporation pan and serves as a support for the hook gauge when measurements are taken. The hook gauge is adjusted until the point just breaks the water surface, and a reading is taken from the attached scale.



255-214 Hook Gauge



255-205 / 255-210 Still Well



255-211M Replacement Graduate

### Replacement Graduate Measurement

The 255-210 Still Well with Fixed Point is placed in the evaporation pan, and the pan is filled with water until the level reaches the tip of a reference rod mounted inside the still well. Each day the pan is refilled to the reference point using a calibrated graduate. The graduate has a surface area of 1/100 that of the pan. Model 255-211E is scaled in inches, therefore each line represents 0.01" of evaporation. Model 255-211M is marked every 20 millimeters, so each line represents 0.2 mm of evaporation.

The choice between hook gauge and graduate measurement is generally made on a practical basis, such as the availability of daily replacement water.

### Totalizing Anemometer

Group 255 Stations include a totalizing anemometer to measure wind run in miles or kilometers. The sensor is mounted on the same platform as the evaporation pan.



200-251x-B Totalizing Anemometer

### Min-Max Thermometer

A floating/submersible Min-Max thermometer monitors the water temperature in the pan. A short cable links the thermometer to a waterproof digital display.



255-212 Floating/Submersible Min-Max Thermometer

## Specifications

### Evaporation Pan

Material: Low carbon stainless steel  
Construction: Heliarc welded, with 1/2" drain plug  
Size: 10" H x 47.5" I.D. (254 mm x 1206 mm)  
Weight/shipping: 50 lbs/68 lbs (23 kg/31 kg)  
Shipping Carton: 50" x 49" x 11"

### Hook Gauge

Span: 3.7" or 7.5 cm  
Graduations, stem:  
Major divisions 1" or 1 cm  
Minor divisions 0.1" or 0.1 cm (1 mm)  
Graduations, dial:  
Major divisions 0.01" or 0.1 mm  
Minor divisions 0.002" or .02 mm  
Size: 7" L x 5.25" Dia (178 mm x 133 mm)  
Weight/shipping: 1 lb/3 lbs (0.5 kg/1.4 kg)

### Stillwell

Material: Stainless steel  
Size: 3.5" Dia x 9" H (89 mm x 229 mm)  
Weight/shipping: 6.5 lbs/10 lbs (2.9 kg/4.5 kg)

### Stillwell with Fixed Point

Height of point: 7.5" (191 mm)  
Material: Stainless steel  
Size: 3.5" Dia x 9" H (89 mm x 229 mm)  
Weight/shipping: 6.6 lbs/10 lbs (3.0 kg/4.5 kg)

### Replacement Graduate

Graduations: 0.01" or 0.2 mm  
Material: Polycarbonate  
Size: 4.75" I.D. x 16" H (121 mm x 406 mm)  
Weight/shipping: 1.5 lbs/3 lbs (0.7 kg/1.4 kg)

### Floating/Submersible Thermometer

Type: Digital minimum-maximum  
Typical range: -18° to +65° C or 0° to +150° F  
Mounting: Polypropylene floats with sun shield  
Size: 11-1/4" long without floats, 13-1/2" with floats  
Weight/shipping: 1 lb/3 lbs (0.5 kg/1.4 kg)

### Totalizing Anemometer

Sensor: 3-cup assembly, glass reinforced nylon  
Counter type: 8-digit electronic, LCD in NEMA-4X enclosure  
Resolution (counter and contact): 0.1 mile or 0.1 km  
Materials: Thermoplastic, anodized aluminum, stainless steel  
Mounting: Pre-drilled flanged base  
Size: 9" diameter (23 cm) x 15" tall (38 cm)  
Weight/shipping: 5 lbs/9 lbs (2.3 kg/4.1 kg)

## Ordering Information

### Hook Gauge Evaporation Station, English (Class A Station)

255-200 Evaporation Pan  
255-205 Stillwell  
255-212 Floating/Submersible Min-Max Thermometer °F  
255-214 Hook Gauge, English units  
200-2510-B Totalizing Anemometer, miles

### Hook Gauge Evaporation Station, Metric

255-200 Evaporation Pan  
255-205 Stillwell  
255-212 Floating/Submersible Min-Max Thermometer °C  
255-215 Hook Gauge, metric  
200-2511-B Totalizing Anemometer, kilometers

### Fixed Point Evaporation Station, English

255-200 Evaporation Pan  
255-210 Stillwell with Fixed Point  
255-211E Replacement Graduate, English  
255-212 Floating/Submersible Min-Max Thermometer °F  
200-2510-B Totalizing Anemometer, miles

### Fixed Point Evaporation Station, Metric

255-200 Evaporation Pan  
255-210 Stillwell with Fixed Point  
255-211M Replacement Graduate, Metric  
255-212 Floating/Submersible Min-Max Thermometer °C  
200-2511-B Totalizing Anemometer, kilometers



255-200 Evaporation Pan