FUAUFAS RG-200

FUAUFAS KEXMY Rg202 Stratus Rain and Snow Gauge

User Manual

Introduction

The FUAUFAS KEXMY Rg202 Stratus Rain and Snow Gauge is a professional-grade instrument designed for accurate long-term measurement of precipitation. Constructed from heavy-duty, UV-resistant polycarbonate, this gauge is built for durability and precision, adhering to US Weather Bureau standards. It is capable of measuring both rain and melted snow/sleet with high accuracy.

Its versatile design allows for clear readings of light showers in hundredths of an inch, and it can accommodate up to 11 inches of total precipitation.

Components

Your FUAUFAS KEXMY Rg202 Stratus Rain and Snow Gauge package includes the following components:

- **Outer Cylinder:** The main transparent body of the gauge, which collects overflow precipitation.
- **Funnel:** Sits atop the outer cylinder, directing precipitation into the inner measuring tube.
- **Inner Measuring Tube:** A calibrated tube inside the outer cylinder for precise measurement of the first inch of precipitation.
- **Post Mounting Bracket:** Used to securely attach the rain gauge to a post or pole.
- **Hardware:** Necessary screws or fasteners for mounting.
- **Daily Precipitation Log:** A record-keeping sheet for tracking measurements.

This image shows the clear polycarbonate rain gauge, consisting of an outer cylinder, an inner measuring tube with markings, and a funnel at the top. It is mounted on a wooden post using the included bracket.

Setup

For optimal accuracy, select an open area for installation, away from trees, buildings, or other obstructions that could interfere with precipitation collection. The gauge should be mounted vertically and level.

1. Attach the provided Post Mounting Bracket to a sturdy post or pole using the included hardware. Ensure the bracket is securely fastened and level.
2. Slide the rain gauge onto the "Quick Connect" bracket. The design allows for easy removal of the cylinder for measurement or cleaning.
3. Ensure the funnel is properly seated on top of the outer cylinder, and the inner measuring tube is placed inside the outer cylinder, beneath the funnel.

Operation

The Stratus Rain and Snow Gauge is designed for straightforward precipitation measurement.

Measuring Rainfall:

- Rainfall up to 1 inch will collect in the inner measuring tube. Read the measurement directly from the calibrated scale on the inner tube, which is accurate to 1/100th of an inch.
- If rainfall exceeds 1 inch, the excess water will overflow from the inner tube into the larger outer cylinder.
- To measure total rainfall when overflow occurs: First, empty the inner measuring tube and record its 1-inch capacity. Then, carefully pour the water from the outer cylinder into the inner measuring tube, one full tube at a time, recording each 1-inch increment. Measure any remaining partial amount in the inner tube. Sum all recorded measurements to get the total precipitation.

Measuring Snowfall/Sleet:

- For snow or sleet, remove the funnel and the inner measuring tube. Allow the snow/sleet to collect directly in the outer cylinder.
- Once collected, allow the snow/sleet to melt completely.
- After melting, pour the melted water into the inner measuring tube to determine the water equivalent, following the same procedure as measuring rainfall, including handling any overflow into the outer cylinder.

Record your daily precipitation measurements in the provided Daily Precipitation Log for consistent tracking.

Maintenance

Regular maintenance ensures the longevity and accuracy of your rain gauge.

- **Cleaning:** Periodically clean the inner and outer tubes with mild soap and water to remove dirt, debris, or algae buildup that could affect readings. The gauge can be easily removed from its mounting bracket for cleaning.
- **Winter Care:** While the gauge is heat and frost resistant, it is crucial to empty all water from both the inner and outer cylinders before freezing temperatures occur. Water left inside the gauge can freeze, expand, and cause the polycarbonate material to crack.
- **Obstruction Check:** Regularly check the funnel and tubes for any obstructions like leaves, insects, or bird droppings that might block the flow of water.

Troubleshooting

If you encounter issues with your rain gauge, consider the following common solutions:

- **Inaccurate Readings:**
  - Ensure the gauge is mounted in an open area, free from overhead obstructions (trees, eaves, etc.) that could block or divert precipitation.
  - Verify the gauge is mounted perfectly level.
  - Confirm the inner measuring tube is correctly seated and not tilted, which could affect the 1-inch overflow point.
  - When measuring overflow, ensure all water from the outer cylinder is transferred to the inner tube accurately without spillage.

- **Cracking of Material:** This typically occurs if water is left in the gauge during freezing temperatures. Always empty the gauge before frost.
- **Inner Gauge Not Standing Straight:** If the inner gauge does not align easily or seat perfectly, inspect the fins on the bottom of the funnel and the top of the inner tube for any deformities or debris.
- **Debris Accumulation:** If the gauge collects debris (e.g., bird droppings), clean it regularly as described in the Maintenance section.

Specifications

Model Number	RG-200
Product Dimensions	14.6 x 5 x 4.9 inches
Item Weight	0.01 ounces
Manufacturer	FUAUFAS
Opening Diameter	4 inches
Rain Gauge Height	14 inches
Material	Heavy-duty, UV-resistant Polycarbonate
Accuracy	1/100th of an inch
Total Capacity	Up to 11 inches

Warranty and Support

Specific warranty details are not provided with this manual. For any product support, inquiries, or to report issues, please contact the manufacturer, FUAUFAS, through their official customer service channels. Refer to your purchase documentation or the product packaging for contact information.