

User Manual

260-2531 Plastic Rain Gauge (English Units) 260-2531M Plastic Rain Gauge (Metric Units)





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DOC 260-2531x UM 20230512

Receiving and Unpacking

Carefully unpack all components and compare to the packing list. Notify NovaLynx Corporation immediately concerning any discrepancy. Inspect equipment to detect any damage that may have occurred during shipment. In the event of damage, any claim for loss must be filed immediately with the carrier by the consignee. Damages to equipment sent via Parcel Post or UPS require the consignee to contact NovaLynx Corporation for instructions.

Returns

If equipment is to be returned to the factory for any reason, call NovaLynx between 8:00 a.m. and 4:00 p.m. Pacific Time to request a Return Authorization Number (RA#). Include with the returned equipment a description of the problem and the name, address, and daytime phone number of the sender. Carefully pack the equipment to prevent damage or additional damage during the return shipment. Call NovaLynx for packing instructions in the case of delicate or sensitive items. If packing facilities are not available take the equipment to the nearest Post Office, UPS, or other freight service and obtain assistance with the packaging. Please write the RA# on the outside of the box.

Warranty

NovaLynx Corporation warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from the date of shipment from the factory. NovaLynx Corporation's obligations under this warranty are limited to, at NovaLynx's option: (i) replacing; or (ii) repairing; any product determined to be defective. In no case shall NovaLynx Corporation's liability exceed product's original purchase price. This warranty does not apply to any equipment that has been repaired or altered, except by NovaLynx Corporation, or that has been subjected to misuse, negligence, or accident. It is expressly agreed that this warranty will be in lieu of all warranties of fitness and in lieu of the warranty of merchantability.

Address

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1 FORWARD

Thank you for purchasing NovaLynx products. NovaLynx has been designing and manufacturing weather instruments since 1988. NovaLynx represents several well-known brands of quality manufacturers, including Gill Instruments, RM Young, Kipp & Zonen, and Vaisala. It is our hope that our products will meet all your monitoring requirements.

2 INTRODUCTION

The **260-2531 Rain Gauge** is a precision instrument constructed of weather-resistant plastic. With minimal care and maintenance it should provide years of service. The gauge is available with English or metric measurement units.

The rain gauge consists of four parts:

- 1) Receiving funnel, which captures the rain.
- 2) Inner measuring tube (graduated in increments of 0.01" or 0.2 mm).
- 3) Outer cylinder, which captures overflow from the measuring tube.
- 4) Mounting bracket.

The rain gauge is read by removing the funnel from the top and lifting out the inner measuring tube. If the inner tube has not overflowed, the amount of water in the tube is read from the scale on the side of the tube and recorded. If the tube has overflowed into the outer cylinder, the amount of water in the measuring tube will be 1.00 inch or 25.4 mm. Pour this water into a clean container and then pour any remaining water from the outer cylinder into the measuring tube. Do this over the container (in case any water spills). Continue measuring water from the outer cylinder into the measuring tube until all the water has been measured, then total the amounts.

3 SPECIFICATIONS

Plastic Rain Gauge	260-2531	260-2531M		
Measurement Units	Inches	Millimeters		
Scale Resolution	0.01 inch	0.2 mm		
Measuring Tube Capacity	1 inch	25.4 mm		
Total Capacity	11 inches	280 mm		
Construction	Clear Plastic			
Dimensions	Ø 4" x 14" Tall (Ø 102 mm x 356 mm Tall)			
Weight / Shipping	2 lbs / 4 lbs (0.9 kg / 1.8 kg)			

4 SITE SELECTION AND INSTALLATION

The location of the rain gauge is very important to the successful operation of the instrument. Choose a convenient location near a good walkway so that the gauge can be read and emptied on a daily basis. The most accurate measurements are made in relatively sheltered areas protected from gusts and turbulent wind. Open spaces between buildings and trees offer some shelter from wind effects; however, the rain gauge should be situated at least twice the distance from such objects as their height.

Install a 4" x 4" vertical wood post (preferably pressure-treated to prevent decay). Cement the post into the ground, making sure to get it as vertical as possible. Allow the cement to cure.

The outer tube of the rain gauge slips onto the mounting bracket only one way, so test-fit the tube onto the bracket before mounting to your support. Hold the assembly next to the post so that the top of the gauge extends 6" above the top of the post. Mark the position of the mounting bracket. Remove the outer tube and attach the bracket to the post using the three screws provided. Do not over-tighten. Replace the outer tube on the bracket and place the funnel on top. Use a carpenter's level to check the level of the top of the funnel in all directions. If the funnel is not level, it may be necessary to add shims under one or two screws to level the gauge.

Complete the installation by placing the measuring tube inside the gauge. Place the funnel on top, and then put the whole assembly on the mounting bracket. **NOTE:** In colder weather, when hail, sleet or snow are expected, do not install the funnel and measuring tube. See instructions below for measuring frozen precipitation.

5 OPERATION

Whenever possible, take readings at the same time each day. Record the readings in a daily log. Use the date on which you take the reading even though much or all of the rain may have fallen the previous day. Enter the readings to the nearest 0.01", or if using SI units, to the nearest 0.2 mm. If the rainfall is less than 0.01" or 0.2 mm, enter "T" for trace in the daily log.

5.1 Measuring Rainfall

If the measuring tube has not overflowed, simply remove the tube from the gauge, place it on a level surface and read the scale to determine the amount of rain. Record the amount, and discard the water. Replace the measuring tube.

If the measuring tube has overflowed into the outer tube, the amount in the measuring tube will be either 1.00 inches or 25.4 mm. Make a note of this amount. Pour the water from the measuring tube into a clean container. Carefully pour more water from the outer cylinder into the measuring tube. Set the measuring tube on a level surface and make a note of this amount. Pour the measured water into the clean container. Continue the process until all the water has been measured. Add up all the amounts. If you have saved the water from each measurement, you can re-measure to reduce the chance of error. Record the total in the daily log. When finished, discard all the water and shake any remaining droplets out of the rain gauge before reassembly.

5.2 Measuring Frozen Precipitation

NOTE: Prior to expected hail, snow or sleet, remove the funnel and measuring tube from the rain gauge.

When it is time to measure the water content, bring the outer cylinder indoors (if possible) and allow the ice to melt. If it is not practical to melt the ice indoors, take warm water (175°F, 80°C) and the measuring tube to the rain gauge site. Fill the measuring tube with the warm water until it overflows from the notch. Pour the warm water into the outer cylinder. When the ice has melted, measure the water as in Section 5.1. Be sure to subtract the 1.00 inch (25.4 mm) of warm water added at the beginning from the total. The result is the water equivalent of the snow/ice. Record it in the daily log.

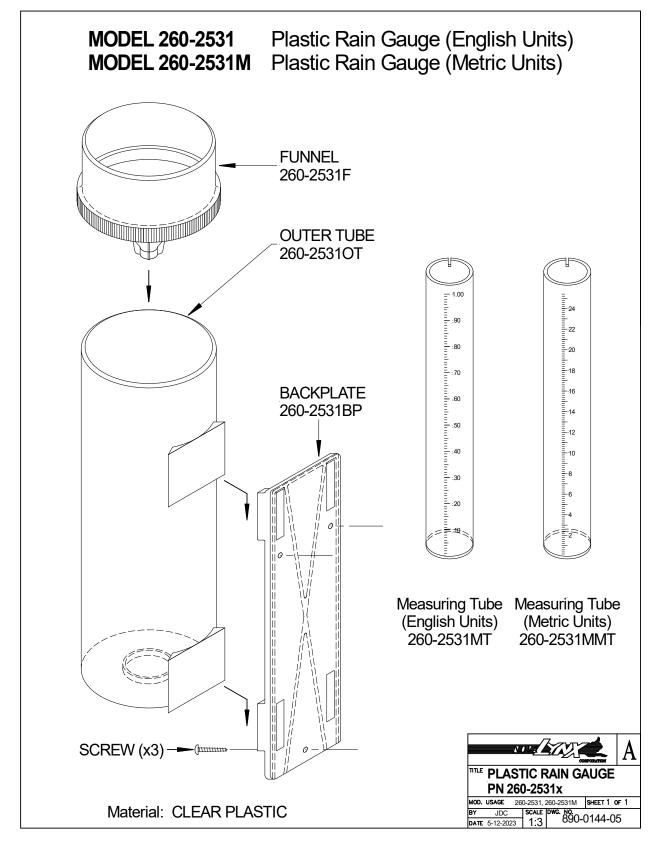
6 MAINTENANCE

- Wash periodically with mild soap or detergent and warm water, using a household bottle brush.
- Do not use solvents or abrasives to clean the gauge.
- Do not wash the gauge in a dishwasher.
- Do not allow accumulated water to freeze in the gauge.

7 REPLACEMENT PARTS

260-2531F	Funnel
260-25310T	Outer Tube
260-2531BP	Back Plate
260-2531MT	Measuring Tube (English Units - inch)
260-2531MMT	Measuring Tube (Metric Units - millimeter)





DAILY PRECIPITATION LOG (JANUARY - JUNE)

NAME

SECTION RANGE

YEAR

ADDRESS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16			JUNE	REMARKS - SEVERE WEATHER - STORM DAMAGE
3 4 5 6 7 8 9 10 11 12 13 14 15 16				
4 5 6 7 8 9 10 11 12 13 14 15 16				
5 6 7 8 9 10 11 12 13 14 15 16				
6 7 8 9 10 11 12 13 14 15 16				
7 8 9 10 11 12 13 14 15 16				
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27				
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29				
30				
31				
TOTAL				

INSTRUCTIONS:

- 1 Try to record precipitation each day at the same time.
- 2 Record precipitation to the nearest 0.01" or 0.2 mm.
- 3 If precipitation is less than 0.01" or 0.2 mm, record "T" for trace.
- 3 Use the remarks column to list any unusual or severe weather (e.g. Mar 6 Snow storm, roads blocked).

DAILY PRECIPITATION LOG (JULY – DECEMBER)

NAME

SECTION RANGE

YEAR

ADDRESS

	JULY	AUG	SEP	OCT	NOV	DEC	REMARKS - SEVERE WEATHER - STORM DAMAGE
1							
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30							
31							
TOTAL	-						

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