Rain Gauge Inspection Log

Site Name:	
Site Type (Control or Monitoring):	
Rain Gauge Brand / Model:	
Inspected By:	
Date and Time:	
Weather:	

Recommended: bring the list of tools found in Inspections_Tool_Kit.pdf to perform maintenance and repairs as needed; **a soft cotton cloth and isopropyl alcohol may be needed to clean the tipping bucket and collector cone**. Contact Opti Support (support@optirtc.com or 1-844-678-4782 ext. 2) for onsite support. Please document each checklist item with a before and after photo (if applicable) .

Panel (Control or Monitoring)

Checklist Item	Result/Notes/Action Taken
Are there signs of moisture, pests, corrosion or other damage inside the panel?	
Photo document all wire connections into the panel's terminal block.	
Wires are tightly landed on the terminal block on the control panel to the extent that there is no possible motion at the point of landing. Possible motion could cause a phantom tick.	
Check all wires labeled 16 or 20 inside the control panel. All should be securely connected to their respective terminals. Confirm continuity exists between terminal position 16 and I/O Module P1R1 Dry GND terminal. Repeat for terminal strip position 20 and P1R1 terminal DI0. Confirm there IS NOT	

continuity between terminals 16 and 20 themselves. **Call Opti support for assistance**	
Ensure that the wires running from the rain gauge to the panel are secured and they cannot be moved by wind.	

Rain Gauge

Checklist Item	Result/Notes/Action Taken
Is the rain gauge free of overhead obstructions? Is the rain gauge located at least 3x the height of nearby objects away from said objects? Include a photo showing the rain gauge position on site compared to all other infrastructure that could influence rain or wind direction.	
Bird spikes present and upright? Indications of birds / nesting present? Example: 	
Inspect collection cone. Is it clean and free of algae, moss or other plant growth, and debris? Ensure water can flow freely (I.e., no clogging). If not, clean/remove debris.	
Remove collection cone - Is the gauge level according to the built-in	

leveling bubble? If not, photo document position and then adjust so it is level. (bubble is below tipping bucket)	
Is the “sump” (bottom interior) of the gauge housing clear of debris? Are the drain holes at the bottom of the housing clean and clear? Photograph any debris present and then remove and clean with a soft cloth. Ensure drain holes remain clear.	
For Davis rain gauges a silver sticker on the tipping bucket support identifies the rain gauge version deployed. Record and photo document version; **call Opti Support to verify correct wiring per rain gauge version.**	
Signs of damage, corrosion, or foreign material adhered to or around the tipping bucket, especially at pivot points? Has any material accumulated inside the tipping bucket that would alter the amount of water it can hold? Remove accumulated material with a soft cloth and non-abrasive cleaner (isopropyl alcohol recommended).	
Does the tipping bucket move freely in both directions? Does it maintain position on either side when at rest (bucket should not bounce, rebound or move in any way once a full tip is completed)	
Attempt to shake the rain gauge via the supporting pole. Does the rain gauge move, rattle or shake in any way? Find a way to brace the mounting pole more effectively if there is any noise from the rain	

gauge or if it appears wind less than 25 mph could move the support at all.	
Complete a manual tipping bucket test. Rock tipping bucket back and forth 10 times at a slow but consistent pace within a one minute period; allow at least 5 minutes to pass before starting pour test.	**Start time:**
Complete a pour test. Note **start time** of test and use the **same volume of water** (use the same bottle/container filled to the same volume **for each test.** Try to pour at a consistent rate for each test). Verify water flows freely out the bottom and record the number of "ticks" observed. Note the end time of test.	**Start time:** **End time:** **"Ticks" observed:**

Comments / Notes:

Completed By: _____ Signature:_____Date:_____