



# J & S Instruments, Inc.

3071 State Route 72 South  
Springfield, Ohio 45505-5023  
Phone 937-325-7499  
Fax 937-323-9588  
Toll-Free 888-LOG DATA

## RG-400 SERIES TIPPING BUCKET RAIN GAUGE DATA SHEET

**3 Year Warranty!**

The RG-400-8 and RG-400-10 Tipping Bucket Rain Gauges are eight and ten inch diameter units respectfully and have been designed and tested to meet or surpass all the specifications defined by the National Weather Service and the U.S. Environmental Protection Agency. These ruggedized units' base, posts and tipping bucket are manufactured of Type 1, Grade 1 PVC making them impervious to water while performing with exceptional accuracy in the harshest of environments found around the world. The RG-400 series' external housing is 17/64 inch green PVC with a total height of only twelve or thirteen inches which contributes to a low profile presentation in the wild while the funnel and screen are anodized aluminum for strength. The remaining hardware and bearing shaft are constructed of corrosion proof 316 stainless steel. Finally, the magnetic proximity reed switch is found in a Teflon<sup>R</sup> waterproof housing with its actuator being an encapsulated ceramic magnet. There is no need for power to run this unit as the reed switch transitions from an open circuit to an approximate 50 millisecond shorted circuit with each .01 inch of rainfall. Other calibration values are available. This unit comes complete with a target bubble mounted to its base for easy leveling during installation and a full twenty feet of 22 AWG two conductor cable.

<b>SPECIFICATIONS:</b>	<b>RG-400-8</b>	<b>RG-400-10</b>
Sensor type:	Tipping Bucket	Same
Accuracy:	±0.5% @ 1"/Hour	Same
Dimensions:	8.0" Dia. Collector 12.0" Total Height	10.0" Dia. Collector 13.0" Total Height
Calibration:	0.01 Inches	Same
Output:	50 msec Switch Closure	Same
Switch:	Sealed Reed Switch	Same
Contact rating:	10 Watts, 200 VDC	Same
Temperature:	32° to 140° F	Same
Weight/Ship:	6.0/7.5 Pounds	9.7/13.0 Pounds

### OPTIONS:

The RG-400 Series Tipping Bucket Rain Gauge is designed to accommodate a DT5E/2 or DT5E Datataker Data Logger being installed within the unit on its housing wall. It also works with the DT-300 Datataker Data Logger as an external unit. See appropriate data sheets on this family of data loggers for specifications. The RG-400 Series becomes a RL-8-5E/2 or RL-10-5E/2, RL-8-5E or RL-10-5E, or RL-8-300 or RL-10-300 with one of these options installed.

(continued)

On occasion, it is necessary to extend the operational temperature range of a rain gauge. For this consideration, a heated rain gauge for measuring rainfall at the freezing point of 32° F is required. By adding -HTR to the part number of your rain gauge of choice, you can get a 540 Watt thermostatically controlled heater installed within the RG-400 series of rain gauges. This option turns on the heater @ 35° F and turns it off @ 55°F. Order power cord and plug as application requires.

**-HTR SPECIFICATIONS:**

Power: 115 VAC, 5 Amps  
Watts: 540  
Thermostat: Closes @ 35° F ±3° F  
                  Opens @ 55° F ±5° F  
Switch Rating: 10 Amps, 240 V max  
Temperature: 0 to 140° F



RL-8-300

February 1998