



## Freezing Rain S7338C

- Extensively tested by NWS
  - “Ice/no ice” signal
- Detects at precipitation rates as low as 0.01 of an inch/hour

This freezing rain sensor technology has been extensively tested by the National Weather Service, and is certified for freezing rain detection as part of the Automated Surface Observing System (ASOS). Development began in early 1980s with technology adapted from aircraft icing detection systems.

This model detects the accumulation of freezing rain on a metal probe that vibrates at a known frequency. When ice accumulates on the probe, the frequency changes and this is analyzed to determine occurrence at precipitation rates as low as 0.01 of an inch per hour. Excessive ice accumulation on the probe can produce a degradation in the detection capability, so the host/controller triggers a heating cycle to “de-ice” the probe after 0.08 inch has accumulated. The sensor then returns to its base resonating frequency. The sensor reports occurrence of freezing rain (yes/no).





## Technical Specifications

**S7338C**

Minimum Detection:	0.005 inches
Ice Signal Output Range:	0.020 - 0.10 inches
Output:	RS-232 (9600, 2400, 300 baud), polled
Output Data:	Discrete "ice/no ice" signal, probe tip frequency
Input Power:	115 VAC
	10 watts in sensing mode
	400 watts in de-icing mode
Temperature Range:	-30°C to +60°C
Power:	115 +/- 10 VAC, 50 - 60 Hz

### PHYSICAL

Dimensions:	389 mm x 269 mm x 112 mm
Weight:	8.2 kg