RS-100 optical rain sensor uses optical induction principle to measure rainfall. Multiple optical probes are installed, and reliable remote sensing algorithm is adopted to ensure reliable detection of rainfall. Different from traditional mechanical sensors, optical rainfall is smaller, more sensitive, reliable, intelligent and easy to maintain. This product supports boot calibration and installation error reminders, supports switching volume and UART output.

Features

1. Support for switching and UART output
2. Support boot calibration
3. Simple installation method, can be applied to a variety of natural environments
4. Maintenance free design, (The deciduous leaves are not easy to cover)
5. Long service life, (Over 5 years)
6. High precision measurement index, (Automatic measurement)
7. Low-power design
8. Multi interface mode
9. Support boot calibration and installation error reminder

Technical Parameters

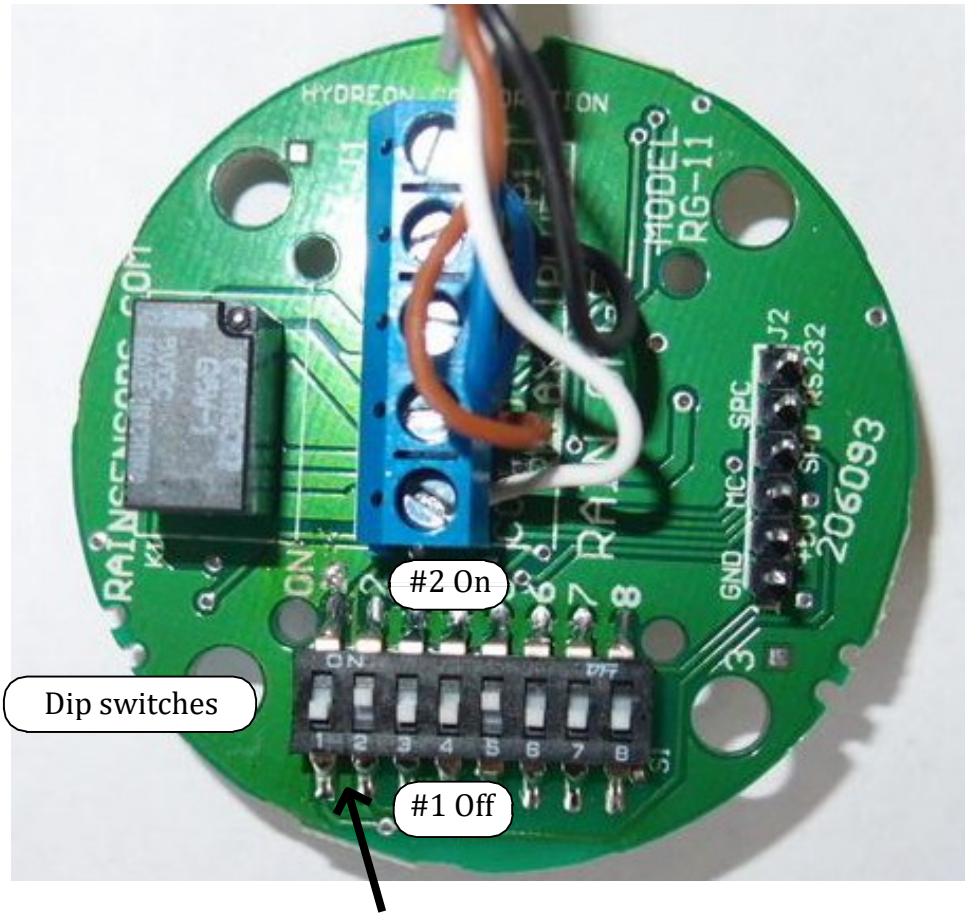
Supply Voltage	9V ~ 35VDC
Temperature Range	-40℃ ~ +85℃
Humidity Range	0 ~ 99%Rh, (No condensation)
Induction diameter	7 CM
Maximum instantaneous rainfall	0.4mm/s
Resolution	0.1mm
Accuracy	±5%
Rated power	≤ 0.3W, (14mA@12VDC)
Unit range	0.2mm/pulse
UART parameter	115200 8N1
Output signal	Relay /UART, Extensible RS485/RS232/GPRS

ADVANCING ALTERNATIVES

Innovate. Grow. Advance.

Default Positions

8 - must be off
7 - must be off
6 - must be off
5 - must be on
4 - must be off
3 - off
2 - on
1 - off



Sensitivity settings:
The sensor has 4 sensitivity settings. Dip switches 1 & 2 set the rain detect threshold:

First drop detection:
1 & 2 off - Very Sensitive - override will begin on first drop detection.

.1 inch per hour setting
1 on, 2 off - Sensitive - override will begin at .1" rain rate.

.25 inch per hour setting
1 off, 2 on – Moderate response - override will begin at .25" rain rate.

1 inch per hour setting
1 & 2 on – Slow response - override will begin at 1" rain rate.

15 minute delay after override clear:
1, 2 & 3 on - override clears 15 minutes after last drop detection.