

For Immediate Release

Finally, a low cost solid state "it's raining" rain detector

MINNEAPOLIS, August 27, 2020 Hydreon Corporation has released a new rain sensor that is a low cost, low power, rugged and reliable "it's raining" precipitation sensor. The new sensor model RG-9 uses beams of infrared light to detect rainfall. Consequently, the sensor is impervious to dirt, dust, insects, birds, and the other nuisances that can plague other sensors. The new sensor consumes very little power and is well suited to solar-powered applications.

The greatest feature of the RG-9 is that it overcomes each of the limitations of previously available sensor technologies. The most common type of "It's raining" sensor is conductive. This is simple but prone to being left in an "always on" state if the surface becomes contaminated. This problem can be overcome with maintenance, but rain sensors are by their nature usually deployed in locations where maintenance is inconvenient. The new RG-9 sensor is completely maintenance-free. Also conductive rain sensors can generally not sense small amounts of water, and the threshold is generally not adjustable. In contrast, the RG-9 readily senses drops smaller than a millimeter. The threshold of the RG-9 may be adjusted to trigger at whatever intensity of rainfall the application requires. The device features a serial output, so trip thresholds may be adjusted as needed by the user's equipment.

Other rain sensor technologies exist, such as capacitive, resistive, mechanical, piezoelectric, laser, or ultrasonic, but each has limitations. They also may not be able to adjust triggering threshold levels, may not be rugged, require maintenance, be too expensive or consume too much power. The RG-9 suffers none of those limitations.

Hydreon has been producing optical rain gauges for over a decade, and the RG-9 provides a lower cost alternative to the Classic RG-11 in applications that need to know if it is raining and if it has stopped. It is a versatile sensor, activated at 4 different rain intensities and 4 levels of hold duration after that intensity is no longer met, making it suitable for a variety of applications.

The Hydreon RG-9 is based on the same principle used in automotive windshield wiper control systems. The construction is similar to prior Hydreon rain sensors, and the device is about the size and shape of a tennis ball. The new model features a serial communication protocol for easy integration into existing systems and a versatile open-collector output suitable for many applications.

The RG-9 is powered with 5-16 VDC and consumes about 110 micro-amps when it is not raining, so the device is well suited to solar power applications. The RG-9 unit cost is \$49.00 each, with discounts for larger quantities. Further information is available at [www.rainsensors.com](http://www.rainsensors.com).

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