



SparkFun Lightning Detector - AS3935 (Qwiic)

SEN-15276

The SparkFun Qwiic Lightning Detector adds lightning detection to your next weather station to make sure you are aware of any potential hazardous weather heading your way. The AS3935 is capable of detecting lightning up to 40km away with an accuracy of 1km to the storm front with a sensitive antenna tuned to pick up lightning events in the 500kHz band. Utilizing our handy Qwiic system, no soldering is required to connect it to the rest of your system. However, we still have broken out 0.1"-spaced pins in case you prefer to use a breadboard.

There are a number of sources that can cause false positives but the lightning detector itself can reliably filter these out by default. If not, we've made sure to include settings you can configure using the lightning detector library to increase the chip's robustness to noise and false positives. The lightning detector library also gives you access to settings such as storm sensing sensitivity when detecting indoors vs outdoors, or the number of lightning strikes needed to trigger an interrupt.

The SparkFun Qwiic connect system is an ecosystem of I²C sensors, actuators, shields and cables that make prototyping faster and less prone to error. All Qwiic-enabled boards use a common 1mm pitch, 4-pin JST connector. This reduces the amount of required PCB space, and polarized connections mean you can't hook it up wrong.

Features

- **Lightning Sensing**
 - 40 km Range with accuracy of 1km in 14 steps
- **Features**
 - Programmable Detection Levels
 - Distance to storm estimation
 - "Disturber" (false event) rejection algorithm
 - Indoor and Outdoor Settings
 - SPI and I²C Interfaces
 - I²C Address: 0x03 (Optional: 0x02, 0x01, 0x00)
 - Qwiic Enabled
- **Operating Range**
 - Supply Voltage: 2.4V - 5.5V

