PRODUCT DETAILS

The Grove - D7S Vibration Sensor is an earthquake detection module that provides real-time monitoring of seismic activities. It uses a high-precision accelerometer and advanced earthquake algorithms to detect and classify various types of vibrations based on their severity.

Feature

- **Real-Time Earthquake Detection:** The Grove - D7S Vibration Sensor uses advanced algorithms to detect and classify seismic events in real time. It can differentiate between different magnitudes of earthquakes and provide corresponding alert signals.
- **Simple Connection and Operation:** Uses the standard Grove connector (HY2.0 - 4Pin) for easy integration with other Grove modules. No complex wiring or soldering is required, making it accessible to users of all skill levels.
- **Low Power Consumption:** The sensor is designed to operate with low power consumption, making it suitable for long-term monitoring applications without draining the power source quickly.
- **Compact and Robust Design:** The Grove - D7S Vibration Sensor has a compact form factor, making it suitable for various applications where space is limited. Its robust construction ensures durability and reliable performance, even in harsh environments.

Description

The Grove - D7S Vibration Sensor is a powerful earthquake detection module that provides real-time monitoring of seismic activities. It is based on the advanced D7S module developed by Omron Corporation, a leading manufacturer of sensing technology.

Designed with simplicity and versatility in mind, the Grove - D7S Vibration Sensor integrates seamlessly with Grove system, a modular prototyping platform. Its standardized interface allows for easy connection to Arduino boards and other compatible development platforms.

Featuring a high-precision accelerometer and sophisticated earthquake algorithms, the Grove - D7S Vibration Sensor offers accurate and reliable detection of seismic events. It can detect various types of vibrations and classify them based on their severity, providing valuable information for earthquake monitoring and safety applications.

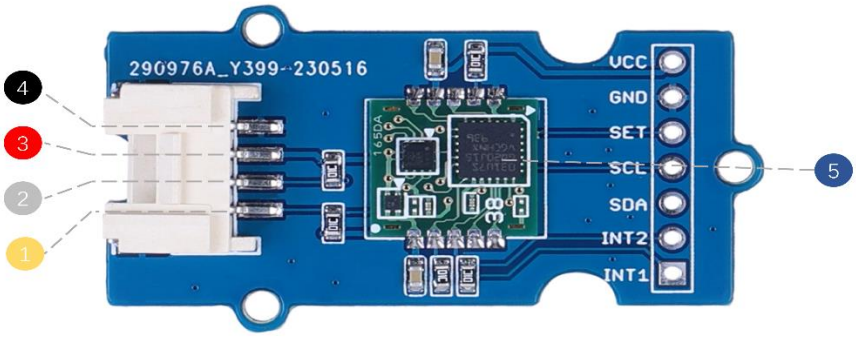
Application

- Earthquake Monitoring Systems
- Seismic Research and Analysis
- Structural Safety Assessment
- IoT-based Seismic Monitoring Networks

Specification

Feature	Specification
Chip	D7S
Measurement Range	±6g
Communication interface	I2C
Grove Connector	4-pin HY2.0
Operating Voltage	3.3/5V

Hardware Overview



4 GND: connect to the system GND
3 VCC: 3.3V or 5V
2 SDA: I2C serial data
1 SDA: I2C serial clock
5 D7S Sensor

Part List

Grove - D7S Vibration Sensor	x1
Grove cable	x1

ECCN/HTS

HSCODE	9031900090
USHSCODE	8517180050
UPC	
EUHSCODE	9013101000
COO	CHINA
CE	1
EU DoC	1
RoHS	1
UK DoC	1