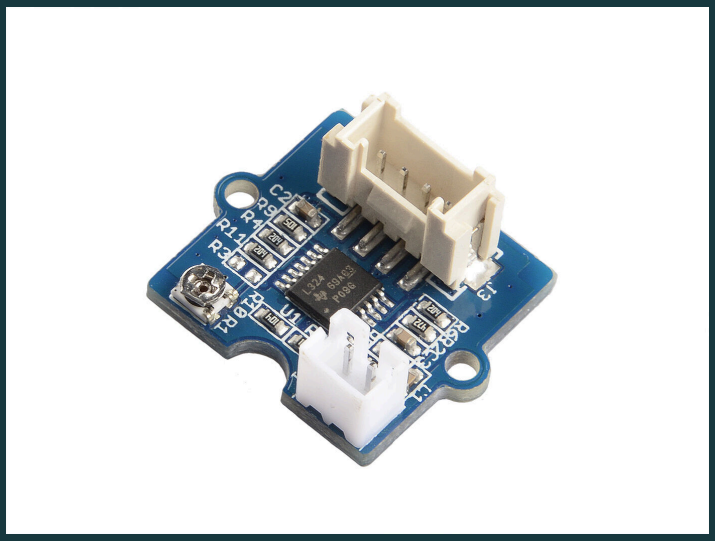
seeed studio

INDUSTRIAL PRODUCT DATASHEET

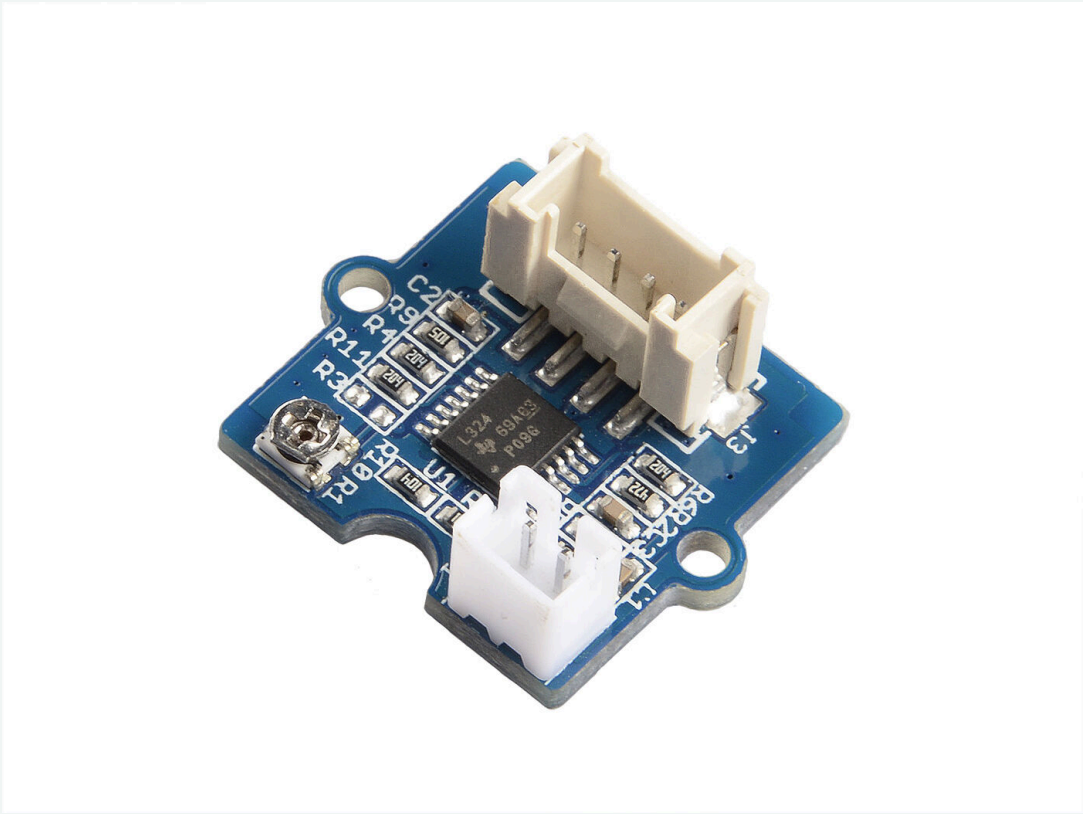
Grove - GSR sensor

The Grove - GSR Sensor is a straightforward yet powerful module designed to capture raw skin conductance data.

SKU	UPDATED	PRICE
101020052	2026-11-11 07:41:39	$10.90(Excl. VAT)



Overview



The Grove - GSR Sensor is a straightforward yet powerful module designed to capture raw skin conductance data. At its core, it acts as a highly responsive variable resistor, measuring the electrical conductance of the skin driven by sympathetic nervous system activity.

Key Features

01 **Direct Skin Conductance Measurement**

Accurately captures real-time variations in skin electrical conductance, providing the essential raw data for analyzing Skin Conductance Response (SCR) and cognitive load.

02 **Raw Analog Output for Edge AI**

Delivers pure, uncompressed analog voltage signals—ideal for ADC sampling, custom feature extraction, and training TinyML models for human-state sensing.

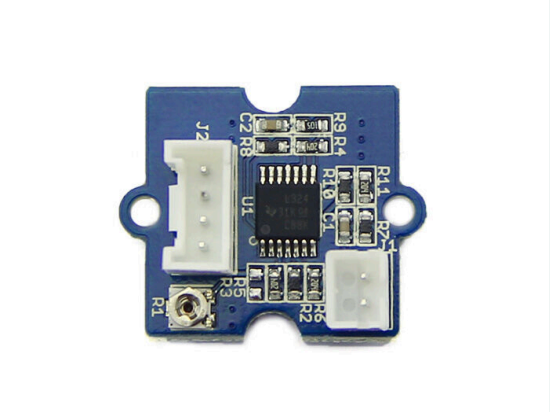
03 **Broad Platform Compatibility**

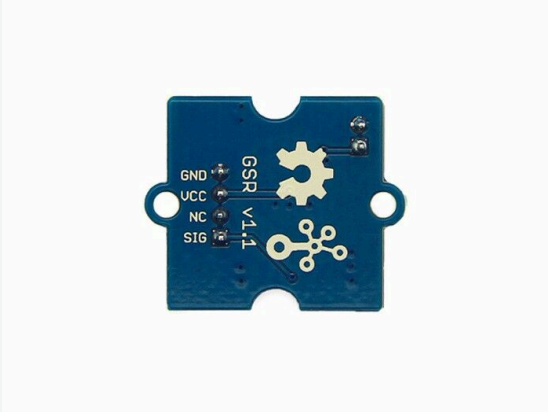
Plug-and-play integration with 3.3V/5V hardware ecosystems, seamlessly supporting Seeed Studio XIAO, Arduino and Raspberry Pi (via ADC)for rapid prototyping.

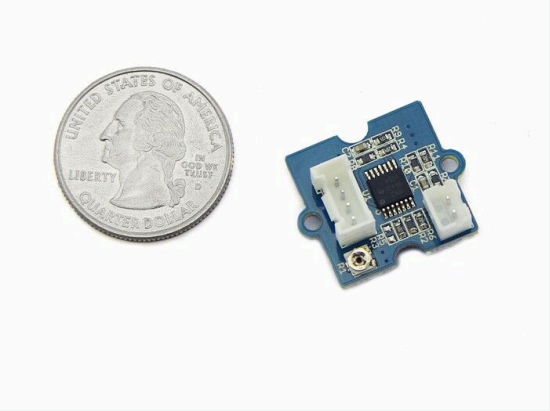
04 **Adjustable Signal Gain**

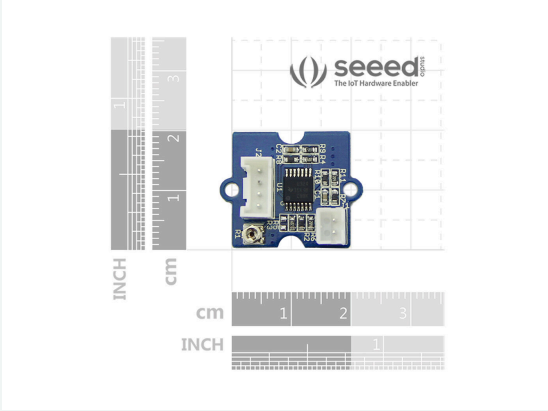
Features an onboard potentiometer to manually tune the analog output amplification. This prevents signal clipping and helps keep the readings centered within your MCU's ADC range across users with varying baseline skin resistance.

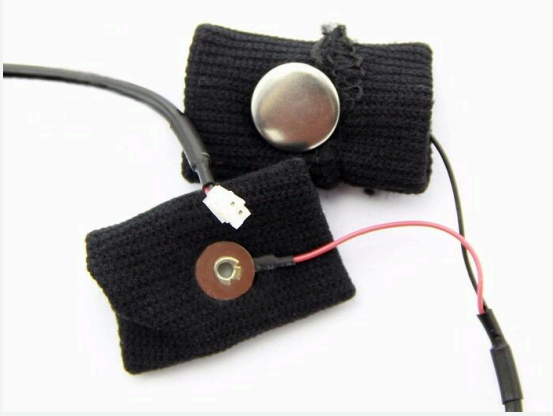
Product Gallery













Applications

- In the experiment, we inserted our fingers into the two electrode fingertips of the sensor and connected a Buzzer to the digital output of the seeeduino.
- During the test, the value detected by the sensor will continue to change within a certain range. When the tester takes a deep breath, the range of the fluctuation will suddenly increase and exceed the threshold we set, and then the buzzer will be triggered.

Resource Links

- https://www.seeedstudio.com/Grove-GSR-sensor-p-1614.html
- Download Wiki PDF
- Grove-GSR v1.0 Sch
- Grove-GSR v1.0 PCB
- Grove-GSR v1.2 Sch
- Grove-GSR v1.2 PCB
- Grove - GSR v1.0 Eagle File
- Grove - GSR v1.2 Eagle File
- LM324 datasheet

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