

KY-039 HEARTBEAT SENSOR

COMPACT IR SENSOR FOR PULSE DETECTION

JOY-IT

SPECIAL FEATURES

- ✓ Heartbeat detection via infrared reflection
- ✓ Compatible with Arduino, Raspberry Pi & Co.
- ✓ Easy to use thanks to analog signal output
- ✓ Operation with 5 V - Ideal for microcontroller systems
- ✓ Particularly compact design
- ✓ Ready for immediate use - fully equipped module



The KY-039 heartbeat sensor is a compact, easy-to-integrate module for detecting the pulse via infrared reflection - ideal for developers, educational institutions and prototype applications in the field of biometrics, wearables or DIY healthcare technology.

The module uses a combination of an infrared light-emitting diode and a phototransistor: if a finger is held between the two components, the light reflection caused by the blood flow can be recorded at the output signal. The heartbeat can be derived from this with appropriate evaluation.

Thanks to the operating voltage of 5V, the KY-039 is fully compatible with common microcontroller platforms such as Arduino, Raspberry Pi or ESP32. The extremely compact design of 16×78×3 mm allows it to be used even in confined project situations or mobile measuring devices.

The sensor is ideal for educational projects, DIY healthcare applications or for integration into biometric measurement systems in the hobby and prototype sector. The fully assembled module is supplied ready for use in your development environment.

MAIN FEATURES

Function	If a finger is held between the infrared light-emitting diode and the phototransistor, the pulse can be detected at the signal output.
Operating voltage	5 V

FURTHER INFORMATION

Weight	4 g
Dimensions	16 x 78 x 3 mm
Item number	SEN-KY039HS
Scope of delivery	SEN-KY039HS
Customs tariff number	9031800000
EAN	4250236816821