

Opto Encoder 4 Click



PID: MIKROE-5979

Opto Encoder 4 Click is a compact add-on board that contains an optical sensor/encoder that can be used for movement or rotation encoding. This board features the [EE-SX4330](#), a transmissive photo-microsensor from [OMRON](#). It is intended to be used with an encoder disk or similar device that will act as a barrier between the emitter and detector of the sensor. Usually, it will be the disk with perforations, which is commonly used to detect the rotation speed. This Click board™ makes the perfect solution for the development of optical sensors in automotive applications, motion, speed, precise motor shaft positioning applications, knob encoder applications, and more.

Opto Encoder 4 Click is fully compatible with the mikroBUS™ socket and can be used on any host system supporting the [mikroBUS™](#) standard. It comes with the [mikroSDK](#) open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this [Click board™](#) apart is the groundbreaking [ClickID](#) feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Specifications

Type	Optical
Applications	Can be used for the development of optical sensors in automotive applications, motion, speed, and direction sensors, precise motor shaft positioning applications, knob encoder applications, and more
On-board modules	EE-SX4330 - transmissive photo-microsensor from OMRON
Key Features	In combination with an encoder disk or similar object, it can detect movement, and the spinning speed, fast response delay time, precise readings, minimal response frequency of 3KHz, two-tower design, low power consumption, and more
Interface	Analog,GPIO
ClickID	Yes
Compatibility	mikroBUS™
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[Opto Encoder 4 Click example on Libstock](#)

[Opto Encoder 4 click 2D and 3D files](#)

[Opto Encoder 4 click schematic](#)

[EE-SX4330 datasheet](#)

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).