

# Magneto 12 Click



PID: MIKROE-4991

Magneto 12 Click is a compact add-on board that contains an accurate and reliable magnetic sensing device. This board features the A31315, a magnetic position sensor designed for on- and off-axis rotary and linear stroke position measurement from Allegro Microsystems. This sensor integrates vertical and planar Hall-effect elements with precision temperature-compensating circuitry to detect two out of three magnetic field components (X and Y). Using configurable signal processing (the user is allowed to process the output signal in analog or digital form), linearization and angle calculation allows the A31315 to accurately resolve the absolute rotary (full 360° and short-stroke <360°) or linear position of a moving magnetic target. This Click board™ is suitable for position sensing applications in automotive, industrial, and consumer applications.

Magneto 12 Click is supported by a [mikroSDK](#) compliant library, which includes functions that simplify software development. This [Click board™](#) comes as a fully tested product, ready to be used on a system equipped with the [mikroBUS™](#) socket.

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	Magnetic
Applications	Can be used for position sensing applications in automotive, industrial, and consumer applications
On-board modules	A31315 - magnetic position sensor from Allegro Microsystems
Key Features	Highly accurate 360° and short stroke (360°) rotary applications, detects two out of three magnetic field components, ratiometric analog output, high reliability, possibility of signal processing in analog and digital form, and more
Interface	Analog,I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[Magneto 12 click example on Libstock](#)

[MCP3221 datasheet](#)

[A31315 datasheet](#)

[Magneto 12 Click schematic](#)

[Magneto 12 click 2D and 3D files](#)

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).