

XSENS MTi-3 Click



PID: MIKROE-4192

XSENS MTi-3 Click is a compact add-on board that contains a fully functional module that can be configured as an Inertial Measurement Unit, Vertical reference Unit, or even an Attitude & Heading Reference System. This board features the MTi-3, a module outputting 3D orientation, 3D rate of turn, 3D accelerations, and 3D magnetic field, depending on the product configuration from Xsens. The industry-standard communication protocol such as UART, SPI, or I2C allows for customization of the data message in terms of data, frequency, and output format. With a roll/pitch accuracy of 1.0° RMS and yaw accuracy of 2° RMS under dynamic conditions, the output of this Click board™ is an excellent choice for control and stabilization of any object and navigation of miniature aerial vehicles, mobile robots or robotics-on-the-move in general, or industrial-grade VR/AR, HMD's and handheld devices.

XSENS MTi-3 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, Motion
Applications	Can be used for control and stabilization of any object and navigation like miniature aerial vehicles, robotics, or industrial-grade VR/AR, HMD's and handheld devices.
On-board modules	XSENS MTi-3 Click is based on the MTi-3, a self-contained Attitude Heading and Reference System (AHRS), Vertical Reference Unit (VRU), and Inertial Measurement Unit (IMU) module from Xsens.
Key Features	Full-featured AHRS module, uniform interface over product lifetime, always best-in-class inertial sensors incorporated, low power consumption, industry-standard communication protocols supported, and more.
Interface	I2C, SPI, UART, USB
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[XSENS MTi-3 click 2D and 3D files](#)

[FT230X datasheet](#)

[AP7331 datasheet](#)

[XSENS MTi-3 click schematic](#)

[XSENS MTi-3 click example on Libstock](#)

[XSENS MTi-3 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).