



Orientation. Position. Xsens.

MTi series

The most accurate and complete MEMS AHRS and GPS/INS



XSENS SUPPLIES MINIATURE MEMS BASED MOTION TRACKERS (IMU, VRU, AHRS AND GPS/INS) FOR INDUSTRIAL APPLICATIONS SUCH AS ANTENNA/CAMERA STABILIZATION AND UNMANNED SYSTEM CONTROL.

TYPICAL APPLICATIONS

















Xsens MTI product line overview							
	Roll/Pitch Typ (Max)	Roll/Pitch Typ (Max)	Yaw Typ	Sensor fusion core	Position & Velocity		
MTi 10-series	Static	Dynamic					
MTi-10 IMU	-	-	-	-	-		
MTi-20 VRU	0.2 ° (0.4 °)	0.5 ° (2.0 °)	Active Heading Stabilization	XKF	-		
MTi-30 AHRS	0.2 ° (0.4 °)	0.5 ° (2.0 °)	1.0 °	XKF	-		
MTi 100-series							
MTi-100 IMU	-	-	-	-	-		
MTi-200 VRU	0.2 ° (0.25 °)	0.3 ° (1.0 °)	Active Heading Stabilization	XEE	-		
MTi-300 AHRS	0.2 ° (0.25 °)	0.3 ° (1.0 °)	1.0 °	XEE	-		
MTi-G-700 GPS/INS	0.2 ° (0.25 °)	0.3 ° (1.0 °)	1.0 °	XEE	1m		
MTi 100-series MTi-100 IMU MTi-200 VRU MTi-300 AHRS	- 0.2 ° (0.25 °) 0.2 ° (0.25 °)	- 0.3 ° (1.0 °) 0.3 ° (1.0 °)	- Active Heading Stabilization	- XEE XEE	- - - - 1m		

SYSTEM INTEGRATION

Integration with the MTi is very straightforward with the Xsens MT Software Suite. The MT Software Suite is an easy-to-use API which can be interfaced with via a COM, C and C++ interface with support for Windows and Linux. In addition, there is complete access to the low level source code for full flexibility on any platform. The components of the MT Software Suite are:

Xsens Device API API to communicate with the MTi. Interfaces for common programming

languages as well as source code for lower communication levels.

Example code To make starting with the MTi even easier, example code is provided for various

platforms, amongst others Matlab and Linux.

MT Manager An intuitive GUI for Windows, including configuration and recording tools,

graphs and a serial port viewer to help understand the XBus protocol.

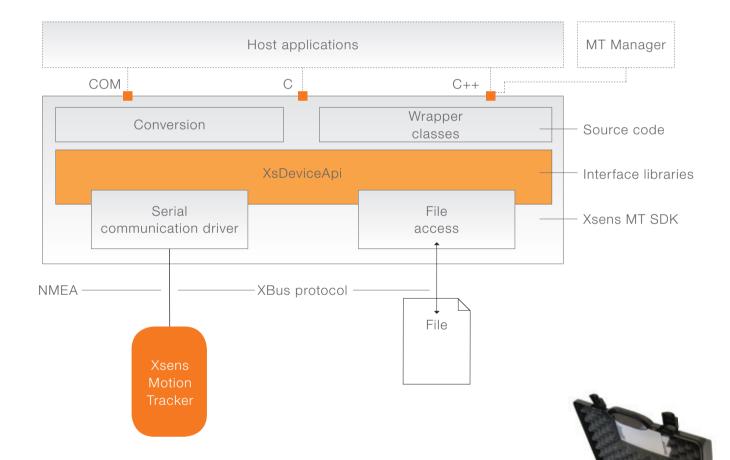
Magnetic Field Mapper An algorithm and tool to calibrate the MTi for hard- and soft iron effects.

The calibration can be done during normal operation; there are no restrictions

on the trajectories or rotations.

Documentation Full (HTML-)documentation on the MTi, API, SDK and application notes.

XSENS MT SOFTWARE SUITE



DEVELOPMENT KIT

The best way to start with the MTi is with the complete MTi Development Kit. This kit will make development very easy. The MTi Development Kit contains the following items:

- One MTi
- Cable set for USB and serial communication, as well as GPIOs
- MT Software Suite (on USB flash drive)
- Robust suitcase
- Test and calibration certificates



ABOUT XSENS

Xsens is the leading innovator in 3D motion tracking technology and products. Its sensor fusion technologies enable a seamless interaction between the physical and the digital world in applications such as industrial control and stabilization, health, sports and 3D character animation. Clients and partners include Electronic Arts, NBC Universal, Daimler, Autodesk, ABB, Siemens and various other leading institutes and companies throughout the world.

Xsens is a Fairchild Semiconductor company, an industry icon delivering power solutions for the mobile, industrial, cloud, automotive, lighting, and computing industries. Xsens has offices in Enschede, the Netherlands and Los Angeles, California.

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