# MTi-200

- Xsens' high-performance product line
- 0.2 deg in roll/pitch accuracy, ultra low heading drift
- Complete SDK and development kits available

The MTi-200 features vibration-rejecting gyroscopes and offers high-quality inertial data, even in challenging environments.

The all-in-one sensor system supports optimized temperature calibration, high-frequency outputs, and has configurable output settings for synchronization with any third-party device.

The MTi-200 is supported by the MT Software Suite which includes MT Manager (GUI for Windows/Linux), SDK, example codes and drivers for many platforms.

Sensor fusion performance



- White label and OEM integration options available
- 3D models available on request
- Available online via Digi-Key, Mouser, Farnell and local distributors

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Roll, Pitch	0.2 deg RMS
Yaw/Heading	unreferenced, low drift
Strapdown Integration (SDI)	Yes
Gyroscope	
Standard full range	450 deg/s
In-run bias stability	10 deg/h
Bandwidth (-3dB)	415 Hz
Noise Density	0.01 º/s/√Hz
g-sensitivity (calibr.)	0.003 °/s/g
Accelerometer	
Standard full range	20 g
In-run bias stability	15 μg
Bandwidth (-3dB)	375 Hz
Noise Density	60 μg/√Hz
Magnetometer	
Standard full range	+/- 8 G
Total RMS noise	0.5 mG
Non-linearity	0.2%
Resolution ————————————————————————————————————	0.25 mG
Barometer	
Standard full range	300-1100 hPa

Complete and detailed specifications are available at **mtidocs.xsens.com** 

3.6 Pa ~0.08m

## Mechanical

IP-rating	IP67
Operating Temperature	-40 to 85 °C
Casing material	Aluminum
Mounting orientation ————	No restriction, full 360° in all axes
Dimensions —————	57x41.90x23.60 mm
Connector —	Fischer SV
Weight ————	55 g
Certifications ———————	CE, FCC, RoHS, MIL-STD-202

#### **Electrical**

Input voltage	3V3, 4.5V-34V
Power consumption (typ)	520 mW

# Interfaces / IO

Interfaces	USB, RS232, RS422, UART
Sync Options	SyncIn, SyncOut, ClockSync
Protocols	Xbus, ASCII (NMEA)
Clock drift	10 ppm (or external)
Output Frequency	Up to 2kHz
Built-in-self test	Gyr. Acc. Mag

### **Software Suite**

GUI (Windows/Linux)	MT Manager, Firmware updater,
	Magnetic Field Mapper
SDK (Example code)	C++, C#,Python, Matlab, Nucleo,
	public source code
Drivers	LabVIEW, ROS, GO
Support —————	BASE by XSENS: online manuals,
	community and knowledge base



Total RMS noise

Resolution

