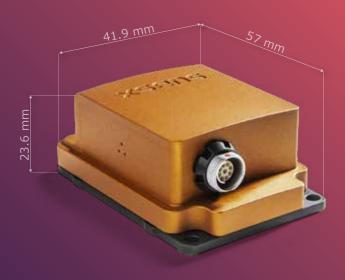
MTi-300

- Movella's high-performance product line
- 0.2 deg in roll/pitch, 1 deg in heading accuracy
- Complete SDK and development kits available

The MTi-300 features vibration-rejecting gyroscopes and offers high-quality inertial data, even in challenging environments.

With Xsens technology inside, 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-300 is supported by the MT Software Suite which includes MT Manager (GUI for Windows/Linux), SDK, example codes and drivers for many platforms.



- White label and OEM integration options available
- 3D models available on request

Sensor fusion performance

Roll, Pitch	0.2 deg RMS
Yaw/Heading	1 deg RMS
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 —————	
Total RMS noise	0.5 mG
Non-linearity	0.2%
Resolution —	0.25 mG

Barometer

Standard full range ————	300-1100 hPa
Total RMS noise	3.6 Pa
Resolution —————	~0.08m

This document is informational and not binding.

Complete and detailed specifications are available at
mtidocs.movella.com

Mechanical

IP-rating —————	IP67
Operating Temperature ———	-40 to 85 °C
Casing material	Aluminum
Mounting orientation ————	No restriction, full 360° in all axe
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

Duilt-III-Sell 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 —————	Online manuals, community and
	knowledge base



