MTi-630

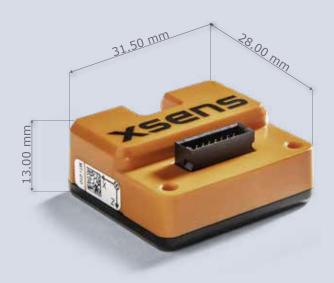
• Small, IP51-rated IMU

Sensor Fusion Performance

- 0.2 deg roll/pitch, 1 deg heading accuracy
- Full Graphical User Interface (GUI) and Software Development Kit (SDK) available

The MTi-630 is an Attitude and Heading Reference System with a small form-factor design for deep integration into your application. Building on the proven MTi 600-series technology it enables a robust and easy to use orientation tracking. It is designed for easy integration and seamless interfacing with other equipment.

The MTi-630 is supported by the MT Software Suite which includes MT Manager (GUI for Windows/Linux), SDK, example codes and drivers for many platforms including ROS.



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

Interfaces / IO

 Available online via Digi-Key, Mouser, Farnell and local distributors

Roll, Pitch	0,2 deg RMS
Yaw/Heading Strapdown Integration (SDI)	1 deg RMS Yes
Gyroscope	ies
Standard full range	2000 deg/s
In-run bias stability	4 deg/h
Bandwidth (-3dB)	500 Hz
Noise Density	0.004 °/s/√Hz
g-sensitivity (calibr.)	0.001 °/s/g
Accelerometer	
Standard full range	10 g
In-run bias stability	10 (x,y) 15(z) μg
Bandwidth (-3dB)	500 Hz
Noise Density	60 μg/√Hz
Magnetometer	
Standard full range	+/- 8 G
Total RMS noise	1 mG
Non-linearity	0.2%
Resolution	0.25 mG
GNSS Receiver	
Brand	n/a
Model	n/a
RTCM input port	n/a
Barometer	

Mechanical	
IP-rating	IP51
Operating Temperature ———	-40 to 85 °C
Casing material	PC-ABS
Mounting orientation ————	No restriction, full 360° in all axes
Dimensions —————	28x31.5x13 mm
Connector —	Main: Phoenix Contact 16 pin, 1.27 mm
	pitch
Weight ————	8.9 g
Certifications	CE, FCC, RoHS

Electrical Input voltage 4.5 to 24V Power consumption (typ) <1 W

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Interfaces	UART, CAN, RS232
Sync Options	SyncIn, SyncOut, ClockSync
Protocols	Xbus, ASCII (NMEA) or CAN
Clock drift	10 ppm (or external)
Output Frequency	Up to 2 kHz, 400 Hz SDI
Built-in-self test	Gyr, Acc, Mag, Baro

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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



Standard full range

Total RMS noise

Relative accuracy



300-1250 hPa

+/- 8 Pa (~0.5m)

1.2 Pa