K-PUS

Digital Magnetic Compass

K-PUS DMC Sensor

Highperformance Heading, Bank and Elevation

K-PUS is high accuracy and high performance Digital Magnetic Compass (DMC) sensor family. It measures Bank (Roll) angle, Elevation (P tch) angle and Heading (Yaw) angle. Results are provided via a bi-directional electrical interface. It includes a 3D accelerometer, a 3D gyroscope and a 3D magnetometer as its primary sensors.

- **Advanced sensor fusion algorithms for accurate calculation of the roll, pitch and yaw angles.**
- **State-of-the-art hard and soft iron calibration algorithms for maximum heading accuracy.**
- **Lightweight and reliable design, ready for use in civilian and military applications.**
- **Numerous modes, settings and options for utilization with great flexibility.**
- **Direct replacement for existing DMC products. (With same mechanical, electronic and software interface, same standard 12-point calibration and easy calibration modes)**

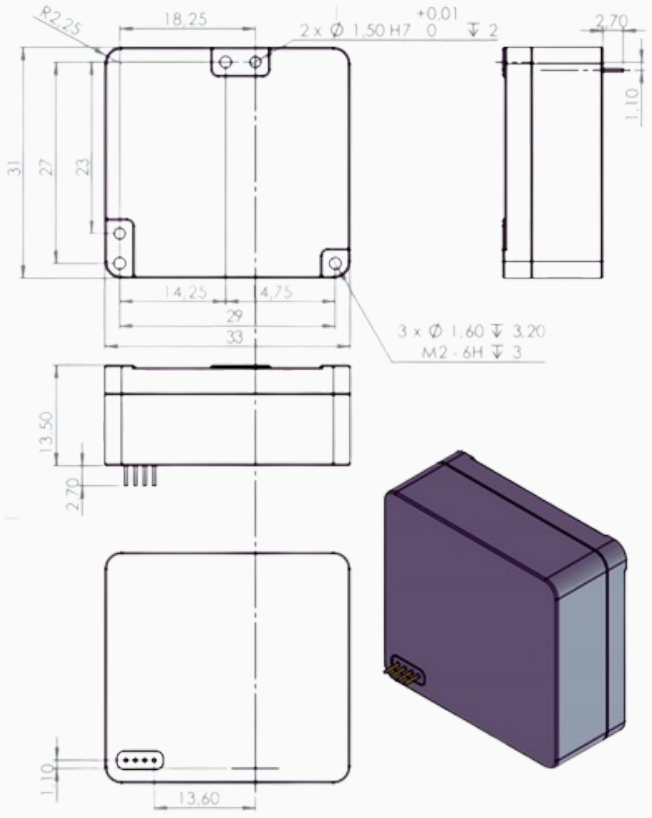
Roll/Pitch Accuracy	Heading Accurcy
0.1° RMS	0.25° RMS

K-PUS SPECIFICATONS

SYSTEM PERFORMANCE PARAMETERS	
	K-PUS-GY2
Roll/Pitch Accuracy	0.1˚ RMS
Heading Accuracy	0.25˚ RMS
Pitch/Roll Operational Range	-80˚ / +80˚
Sampling Rate	Up to 50 Hz

*Values may change due to magnetic distortion and metal objects around the system. Typical heading accuracy is 0.1° for K-PUS-GY2 series

PHYSICAL AND ELECTRICAL PROPERTIES	
Communications Interface	UART (TTL)
Power Supply	5 V (± %5)
Dimensions	33x31x13.5 mm
Sampling Rate	1 to 50 Hz
Dimensions	33x31x13.5 mm
Weight	< 26 gr
Power Consumption	300mW
Operating Temprature	-32°C to 65°C



K-PUS series mechanical drawing, dimensions are in mm