

IM19

High precision inertial module



18.4 x 14.8 x 2.8 mm

Product description

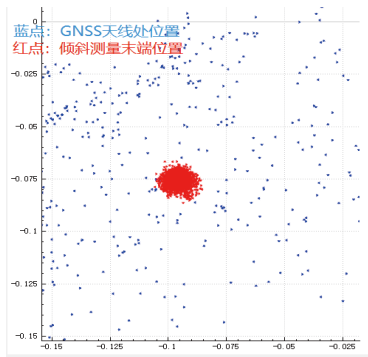
- High precision attitude sensing and dead reckoning

Features

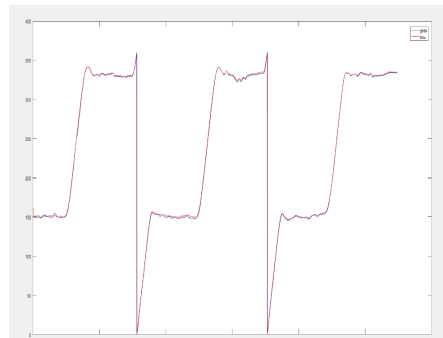
Gyroscope	ARW	0.17 deg/√h
	Bias stability	± 4.5 deg/h
	Range	± 1000 deg/s
Accelerometer	Speed RW	0.04 m/s/√h
	Bias stability	± 0.3 mg
	Range	± 16 g
Roll and pitch	≤ 0.02° (1σ)	
Heading	≤ 0.2° (1σ)	
IMU accuracy	≤ 1% * D (1σ,vehicle)	
Data rate	100Hz	
Power	0.33W	

Application areas

- A. Tilt compensation in RTK surveys (precision and user experience on par with Leica GS18T, no need for horizontal alignment of the leveling pole, 1cm accuracy with a tilt angle of 0-30°, 2cm accuracy up to 60° tilt)
- B. Autonomous drive in Agriculture, providing better than 0.5° accuracy in heading.
- C. Dead reckoning, providing better than 1% DR accuracy of travelled distance when GNSS outage is within 60 seconds.



A



B



C