

aSense IMU

INERTIAL MEASUREMENT UNITS

The aSense inertial measurement units, built on temperature-compensated MEMS technology with low-noise gyroscopes and accelerometers, deliver high-accuracy inertial measurements for land, air and maritime platforms as well as munition systems. Compact and lightweight, they form the sensing core of the aSense integrated GNSS/INS family.



aSense110-IMU

	aSense110-IMU	aSense120-IMU	aSense130-IMU
Gyro measurement range	± 500 °/s	$\pm 500/2000$ °/s	$\pm 500/2000$ °/s
Accelerometer range	± 8 g	$\pm 10-80$ g	$\pm 10-80$ g
Gyro bias repeatability (1σ)	≤ 30 °/h	≤ 8 °/h	1 °/h
Gyro bias stability (1σ)	≤ 2.5 °/h	≤ 1.1 °/h	≤ 1.0 °/h
Accel bias stability (1σ)	< 0.05 mg	< 0.02 mg	< 0.01 mg
Angular random walk	≤ 0.15 °/√h	≤ 0.15 °/√h	≤ 0.08 °/√h
Scale factor repeatability	≤ 300 ppm	≤ 200 ppm	≤ 150 ppm
Axis misalignment	≤ 0.5 mrad	≤ 0.5 mrad	≤ 0.5 mrad
Power / interface	5 V @ 145 mA · RS-422/485	5 V @ 145 mA · RS-422/485	5 V @ 145 mA · RS-422/485
Size / weight	42.2 × 45 × 26.7 mm · 80 g	42.2 × 45 × 26.7 mm · 90 g	42.2 × 45 × 26.7 mm · 90 g

PRECISION SENSING FOR YOUR SYSTEM

Tell us your dynamics and accuracy needs – we'll match the right aSense IMU.