Inertial Labs

Attitude is Everything

- Attitude and Heading Reference Systems
- Training and Motion Capture Systems
- Miniature 3D Orientation Systems
- Weapon Orientation Modules
- Vertical Gyroscopes

Inertial Labs provides industry leading inertial orientation solutions with an uncompromising focus on products that represent the smallest size and lowest cost alternatives for their given class of performance.
Inertial Labs current product offerings in weapon orientation, 3D orientation, and attitude and heading reference systems all represent this focus. Each provides excellent performance in a fraction of the size and cost of the closest competitive devices.

Inertial Labs also provides professional services in the field of position and orientation tracking with specific focuses on the needs of military and law enforcement training and simulation. Our development projects in the past have included indoor/outdoor position and orientation tracking of personnel and weapons, high precision weapon orientation tracking for live force-on-force target engagement purposes, inertial sensor based pedestrian navigation, full body orientation tracking, and more.

	**Optically Enhanced Attitude and Heading Reference Systems OptoAHRS**	Heading, static accuracy	deg	0.2
		Heading, dynamic accuracy	deg	0.4
		Pitch and Roll, static accuracy	deg	0.1
		Pitch and Roll, dynamic accuracy	deg	0.3
	**Attitude and Heading Reference Systems AHRS**	Heading, static accuracy	deg	0.4
		Heading, dynamic accuracy	deg	0.7
		Pitch and Roll, static accuracy	deg	0.1
		Pitch and Roll, dynamic accuracy	deg	0.3
	**Vertical Gyroscopes VG**	Pitch and Roll, static accuracy	deg	0.1
		Pitch and Roll, dynamic accuracy	deg	0.3
		Gyroscopes noise	deg/sec√Hz	0.035
		Accelerometers noise	mg√Hz	0.04
	**Weapon Orientation Modules WOM**	Heading, static accuracy	deg	0.17
		Pitch and Roll, static accuracy	deg	0.1
		Gyroscopes in-run Bias stability	deg/hr	72
		Accelerometers in-run Bias stability	mg	0.05
	**Optically Enhanced Weapon Orientation Modules OptoWOM**	Heading, static accuracy	deg	0.2
		Pitch and Roll, static accuracy	deg	0.1
		Gyroscopes in-run Bias stability	deg/hr	72
		Accelerometers in-run Bias stability	mg	0.05
	**Miniature 3D Orientation Sensors OS3D**	Size	mm	50*14*9
		Weight	gram	12
		Heading, static accuracy	deg	1
		Pitch and Roll, static accuracy	deg	0.2
	**Subminiature 3D Orientation Sensors OS3DM**	Size	mm	16*10*3
		Weight	gram	2
		Heading, static accuracy	deg	1
		Pitch and Roll, static accuracy	deg	0.2