

Quick Comparison Chart

3D Guidance Trackers Vs. Legacy Trackers

Specification/Tracker Click for Data Sheet		3D Guidance Trackers			Legacy Trackers		
		driveBAY	trakSTAR	medSAFE	miniBIRD	pciBIRD	Flock
Degrees of Freedom (DOF)		6	6	6	6	6	6
Technology		3rd Generation DC Magnetic	3rd Generation DC Magnetic	3rd Generation DC Magnetic	2nd Generation DC Magnetic	2nd Generation DC Magnetic	
Accuracy (RMS)		Position 1.4 mm Orientation 0.5 °	Position 1.4 mm Orientation 0.5 °	Position 1.4 mm Orientation 0.5 °	Position 1.8 mm Orientation 0.5 °	25 mm Sensor Position 1.0 mm Orientation 0.5 °	8 mm Sensor Position 1.4 mm Orientation 0.5 °
Static Resolution		0.5 mm at 30.5 cm 0.1° at 30.5 cm	0.5 mm at 30.5 cm 0.1° at 30.5 cm	0.5 mm at 30.5 cm 0.1° at 30.5 cm	0.5 mm at 30.5 cm 0.1° at 30.5 cm	0.5 mm at 30.5 cm 0.1° at 30.5 cm	
Range for Specified Accuracy	* Short-Range Transmitter (8 mm Sensor)	46 cm	46 cm	46 cm	No	No	
	* Mid-Range Transmitter (8 mm Sensor)	78 cm	78 cm	78 cm	76 cm	76 cm	
	* Wide-Range Transmitter (8 mm Sensor)	No	2.1 m	No	No	No	
	* Flat (Radio Opaque) Transmitter (1.5 mm and 2 mm Sensor)	No	No	46 cm in Z (up) direction	No	No	
Update Rate Per Sensor		240 Hz (default) 420 (max)	240 Hz (default) 420 (max)	Contact ATC	120 Hz	105 Hz	
Sensor Sizes (OD)		8 mm, 2 mm, 1.5 mm, 0.9 mm	8 mm, 2 mm, 1.5 mm, 0.9 mm	8 mm, 2 mm, 1.5 mm, 0.9 mm	8 mm, 5 mm	25 mm, 8 mm	
Number of 6DOF Sensors Per Elec. Unit		4	4	4	1	2 per pci card	
Maximum Number of Tracked 6DOF Sensors		4	16	4	4	4	
Tracking Stability	* Distortion Due to Non-Magnetic Conductive Metal	Low	Low	Low	Low	Low	
	*Distortion Due to Stainless Steel (300 Series), Titanium, and Composites	None	None	None	None	None	
Power-line Noise Filtered Out with No Effect on Latency		Yes	Yes	Yes	No	No	
Advanced New Signal Processing for Quiet & Fast Dynamic Performance		Yes	Yes	Yes	No	No	
External Electronics Unit		No (module fits in PC)	Yes	Yes	Yes	No	
Cable Sensitivity to Noise		None	None	None	None	None	
External Power "Brick"		No	No	No	Yes	Yes	
Interface		USB1.1 and 2.0	USB 2.0 and RS-232	USB 2.0 and RS-232	RS-232	PCI bus	
GUI Interface for Demo Applications		Yes	Yes	Yes	Yes	Yes	
Software Tools for Windows Developers		WIN API *	WIN API *	WIN API *	API (Bird dll) *	WIN API *	
Regulatory Certification		Class 1 Medical Device, Type B Applied Part (Sensors)	Class 1 Medical Device, Type B Applied Part (Sensors)	Class 1 Medical, Type CF, Defib Proof	Class A General Purpose Device	Class 1 Medical Device, Type B Applied Part (Sensors)	
RoHS & WEEE Standards		Compliant	Compliant	Compliant	Exempt	Exempt	
On-Board Diagnostics/Corrections		Yes	Yes	Yes	No	Limited	
Flash Firmware Upgrades		Yes	Yes	Yes	No	No	
Button Mode		No	Yes	Yes	Yes	Yes	
Price (Single 8mm Sensor/MRT)		\$3,640	\$3,790	Contact ATC	\$3,995	\$3,795	
						N/A (25 mm sensors only)	

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* Sample code and expert support available at no charge