

# Ascension New Product Comparison Chart

## driveBAY and trakSTAR Vs. Legacy Products

Specification/Tracker		3D Guidance Trackers		Legacy Trackers		
		driveBAY	trakSTAR	miniBIRD	pciBIRD	Flock
Degrees of Freedom (DOF)		6	6	6	6	6
Technology		3rd Generation DC Magnetic	3rd Generation DC Magnetic	2nd Generation DC Magnetic	2nd Generation DC Magnetic	1st Generation DC Magnetic
Accuracy (RMS)		Position 1.4 mm Orientation 0.5 °	Position 1.4 mm Orientation 0.5 °	Position 1.8 mm Orientation 0.5 °	25 mm Sensor	8 mm Sensor
					Position 1.0 mm Orientation 0.5 °	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	* Mid-range Transmitter (8 mm sensor)	78 cm	78 cm	76 cm	76 cm	76 cm
	* Extended Range	No	No	No	No	Yes
	* Short-Range (230 grams)	Yes	Yes	No	No	No
Update Rate Per Sensor		240 Hz (default) 420 (max)	240 Hz (default) 420 (max)	120 Hz	105 Hz	144 Hz
Sensor Sizes (OD)		8 mm, 2 mm, 1.5 mm	8 mm, 2 mm, 1.5 mm	8 mm, 5 mm	25 mm, 8 mm	25 mm
Number of Sensors Per Elec. Unit		4	4	1	2 per pci card	1
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	No	No	No
Advanced New Signal Processing for Quiet & Fast Dynamic Performance		Yes	Yes	No	No	No
External Electronics Unit		No (module fits in PC)	Yes	Yes	No	Yes
Cable Sensitivity to Noise		None	None	None	None	None
External Power "Brick"		No	No	Yes	Yes	Yes
Interface		USB1.1 and 2.0	USB 2.0 and RS-232	RS-232	PCI bus	RS-232
GUI Interface for Demo Applications		Yes	Yes	Yes	Yes	Yes
Software Tools for Windows Developers		WIN API	WIN API	API (Bird dll)	WIN API	API (Bird dll)
Regulatory Certification		Class 1 Medical Device, Type B Applied Part (Sensors)	Class 1 Medical Device, Type B Applied Part (Sensors)	Class A General Purpose Device	Class 1 Medical Device, Type B Applied Part (Sensors)	Class A General Purpose Device
RoHS & WEEE Standards		Compliant	Compliant	Exempt	Exempt	Exempt
On-Board Diagnostics/Corrections		Yes	Yes	No	Limited	No
Flash Firmware Upgrades		Yes	Yes	No	No	No
Button Mode		No	Yes	Yes	Yes	Yes
Price (Single 8mm Sensor/MRT)		3,640	3,790	3,995	3,795	N/A (25 mm sensors only)