

	MARGO	Ethoscopes	flyGrAM	BioTracker	Bonsai	ToxTrac	flyTracker	Ctrax	idTracker	Tracktor
Real-time	real-time or offline	real-time	real-time	real-time or offline	real-time or offline	offline	offline	offline	offline	offline
Peripheral hardware integration	yes	yes	yes	camera only	Yes	no	no	no	no	no
Supports experimental modules	yes	yes	one	no	depends	no	no	no	no	no
Custom hardware required	none	ethoscope	flyGrAM apparatus	none	none	none	none	none	none	none
Track multiple animals per ROI	yes	yes	group locomotion only	yes	depends	yes	yes	yes	yes	yes
Resolves identity through collisions	no	no	no	no	depends	yes	yes	yes	yes	no
Limb, head, midline, wing tracking	no	no	no	no	depends	no	yes	yes	yes	no
GUI	yes	yes	yes	yes	depends	yes	yes	yes	yes	no
ROI definition	automatic, grid-based, or manual	dependent on hardware		manual drawing	depends	automatic or manual	automatic, grid-based, or manual	single ROI	manual drawing	manual definition
Notes	fast tracking with support for hardware control	low-cost, easily-scalable hardware module	could extend software and hardware to other applications	allows user defined tracking algorithms	visual programming environment for combining data streams in real time	simple installation and user-interface (MS Windows only)	uses feature detectors to track individual postural elements	widely used, has companion behavioral analysis toolbox	uses deep networks and fingerprinting to identify individuals	well-suited to applications with non-static background