





	SMARTTRACK3	SMARTTRACK3-IF	SMARTTRACK3/M	SMARTTRACK3/M-IF
Tracking volume	small to medium tracking volumes	small to medium tracking volumes Also tracks in sunlit areas	small tracking volumes	small tracking volumes also tracks in sunlit areas
Ideal for	For all tracking purposes in small volumes (e.g. VR applications with head tracking and Flystick at small Powerwalls or CAVEs)		optimized for tracking in simulators or inside car or airplane cockpits	
Image Sensor	1280 x 1024 Pixel			
Benefits	 mobile and compact all-in-one system robust against vibrations and shock controller/all processing integrated cost efficient tracking system OS support of the GUI: Windows (10,11,), Linux 	see SMARTTRACK3, plus: • also tracks in sunlit areas	 benefits in addition to SMARTTRACK3: even smaller enhanced robustness against vibrations and shock optimized mounting for integration allows shorter tracking distances, i.e., the user can get closer alternative lenses for narrow FoV lower weight 	see SMARTTRACK3/M, plus: • also tracks in sunlit areas
Frame rate (sensor)	150 Hz @ full frame, up to 240 Hz with reduced tracking volume			
Tracking range*	0.3 – 3.5 m	0.3 – 2.5 m	0.12 - 1.7 m (2.9 mm lens) 0.3 - 2.3 m (3.5 mm lens)	0.12 - 1.7 m (2.9 mm lens) 0.3 - 2.0 m (3.5 mm lens)
Image processing	integrated			
Status indicator	2 LEDs; dimmable			
IR source	high power LEDs, 850nm, adjustable in intensity (exempt group according to IEC62471-1)			
Filters	longpass	bandpass	longpass	bandpass
Effective transmission	795 - 1100 nm	845 - 859 nm	795 - 1100 nm	845 - 859 nm
Suppression in rejection regions	avg. $> 10^4 - 10^5$	avg. > 10 ⁶	avg. $> 10^4 - 10^5$	avg. > 10 ⁶
SMARTTRACK3/M-IF: Narrow bandpass filter for suppression of unwanted stray light / wavelengths (factor > 10 vs. standard SMARTTRACK3/M). Extended camera parameters to further improve daylight sensitivity in user-specific scenario available.				
Data transfer, sync and power supply	single cable solution // data: Gigabit Ethernet power: PoE (IEEE 802.3af-2003) via max. 100 m RJ45 cable (CAT5)			
Size (W & H & D)	approx. 381 x 54 x 93 mm		approx. 280 x 40 x 90 mm	
Weight	approx. 1.5 kg		approx. 1.0 kg	
Cooling	passive, noiseless			
Operation temperature 035° C (when used on the car dashboard in bright sunlight, heat protection must be established)				
Relative humidity	585% (non-condensing)			
Power consumption	12 W			
Mounting	ceiling mount with a standard tripod thread		additional mounting option with brackets	
Compatibility	cascade between SMARTTRACKs and ARTTRACKs			
	peripherals: targets, LP-Research, Manus gloves, Measurement Tool, Flystick not supported: Fingertracking, Motion Capture			
*based on 12mm spherical passive r	markers: Higher ranges possible with larger or active market	rs		

ART Advanced Realtime Tracking

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