

SMARTTRACK3/M (-IF)



SMARTTRACK3/M is the latest version of the ART plug & play tracking solution for small volumes. Two tracking cameras and the controller are integrated in a compact housing. When delivered, SMARTTRACK3/M is pre-calibrated and may be used immediately. The compact size and the integrated controller make SMARTTRACK3/M the ideal mobile tracking system. The PoE power supply allows usage without separate power cable. Optionally SMARTTRACK3/M-IF is available, with a narrow bandpass filter for tracking in daylight conditions making applications possible such as in-car tracking.

Technical Data

General Camera Data		SMARTTRACK3/M	SMARTTRACK3/M-IF			
Image sensor		1280x1024 Pixel				
Frame rate (sensor)		150 Hz @ full frame, up to 240Hz with reduced tracking volume				
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 (IF)			
Effective transmission		795 - 1100 nm	845 - 859 nm			
Suppression in rejection regions:		avg. > 10 ⁴ - 10 ⁵	avg. > 10 ⁶			
SMARTTRACK3/M-IF: <i>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.</i>						
Connectors		SMARTTRACK3/M	SMARTTRACK3/M-IF			
Data transfer & power supply		Single cable solution data: Gigabit Ethernet power: PoE (IEEE 802.3af-2003) via max. 100 m RJ45 cable (CAT5)				
Synchronization in / out		1x BNC: Video Signal (75 Ω), TTL, LVTTTL (in / out not simultaneously)				
Peripherals		1 x USB 2.0 (e.g. Radio Transceiver2/3, service access)				
Operating conditions		SMARTTRACK3/M	SMARTTRACK3/M-IF			
Cooling		passive, noiseless				
Temperature		0 ... 35° C				
Relative humidity		5 ... 85% (non-condensing)				
Power consumption		12 W				
Dimensions		SMARTTRACK3/M	SMARTTRACK3/M-IF			
Size (W x H x D)		approx. 280 x 40 x 90 mm				
Weight		approx. 1.0 kg				
Available lenses and operation modes						
Compatible lenses	Item number		Operation mode			
	SMARTTRACK3/M	SMARTTRACK3/M-IF	@ 150Hz	@ 180Hz	@ 240Hz	
2.86 mm	V135121	V135131	Sensor resolution (pixels)	1280 x 1024	1280 x 880	1280 x 660
			FoV (horiz. x vert.) [deg]	135° x 102°	135° x 86°	135° x 62°
			Tracking range*	0.12m – 1.7 m (0.12m – 1.7 m) **		
3.5 mm	V135122	V135132	FoV (horiz. x vert.) [deg]	83° x 70°	83° x 62°	83° x 49°
			Tracking range*	0.3m – 2.3m (0.3m – 2.0m) **		

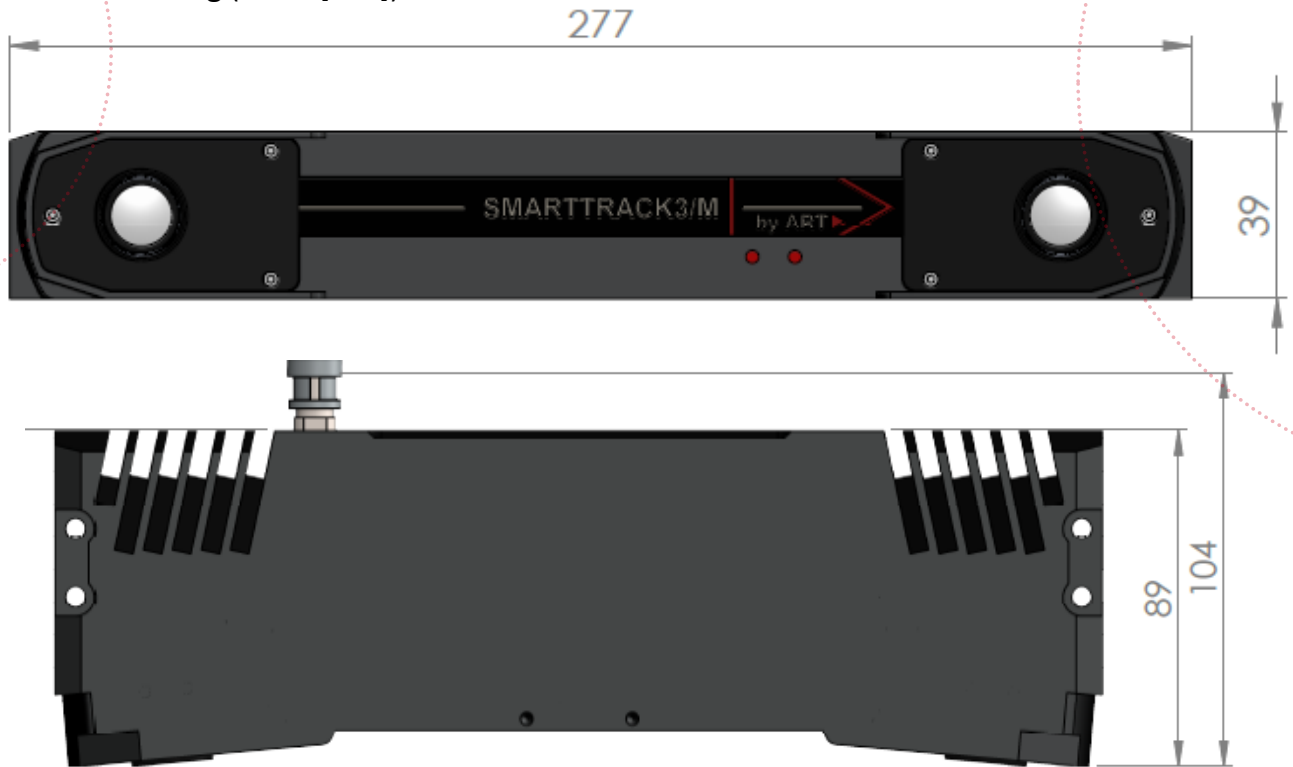
* based on 12 mm spherical passive markers: Higher ranges possible with larger or active markers

** in brackets: Tracking range for SMARTTRACK3/M-IF with bandpass filter with default sensitivity parameters

System latency	@ 150Hz	@ 180Hz	@ 240Hz
4 targets	9ms	8ms	6ms

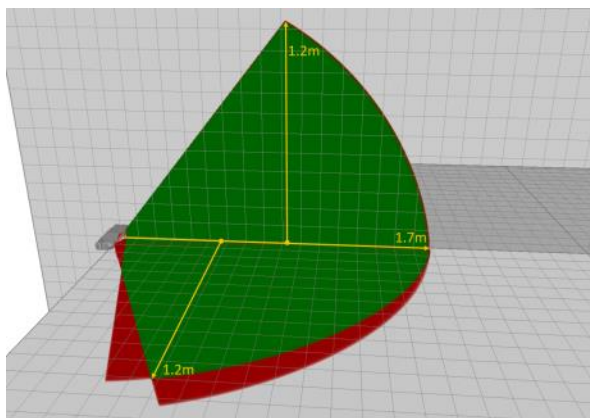
Certifications
<ul style="list-style-type: none">• CE• FCC Part 15 B, Class B• TUEV SUED NRTL

Technical Drawing (units: [mm])



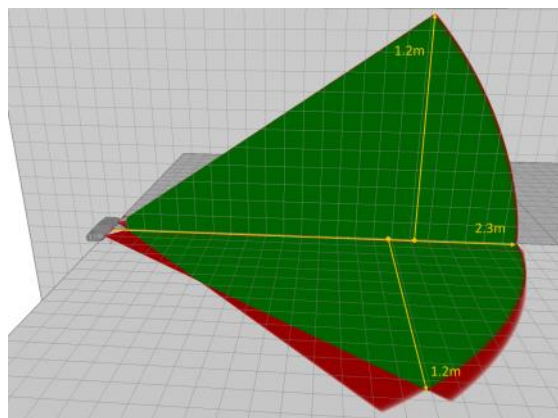
Coverage Area

SMARTTRACK3/M 2.86mm



any filters

SMARTTRACK3/M 3.5mm



with bandpass filter: 0.3m – 2.0m