

SMARTTRACK3(-IF)



SMARTTRACK3 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 is pre-calibrated and may be used immediately. The compact size and the integrated controller make SMARTTRACK3 the ideal mobile tracking system. The PoE power supply allows usage without separate power cable.

Optionally SMARTTRACK3-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	SMARTTRACK3-IF		
Image sensor	1280 x 1024 Pixel				
Frame rate (sensor)	180 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-IF: <i>Narrow bandpass filter for suppression of unwanted stray light / wavelengths (factor > 10 vs. standard SMARTTRACK3). Extended camera parameters to further improve daylight sensitivity in user-specific scenario available.</i>					
Connectors		SMARTTRACK3	SMARTTRACK3-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, LVTTL (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	SMARTTRACK3/MF		
Size (W x H x D)	approx. 381 x 54 x 93 mm				
Weight	approx. 1.5 kg				
Available lenses and operation modes					
Compatible lenses	Item number		Operation mode		
	SMARTTRACK3	SMARTTRACK3-IF	@ 180Hz	@ 240Hz	
2.86 mm	V132011	V133011	Sensor resolution (pixels)	1280 x 1024	1280 x 800
			FoV (horiz. x vert.) [deg]	135° x 102°	135° x 78°
			Tracking range*	0.3m – 3.5 m (0.3m – 2.5 m) **	
3.5 mm	V135102	V135112	FoV (horiz. x vert.) [deg]	83° x 70°	83° x 56°
			Tracking range*	0.4m – 4.0m (0.4m – 2.5m) **	

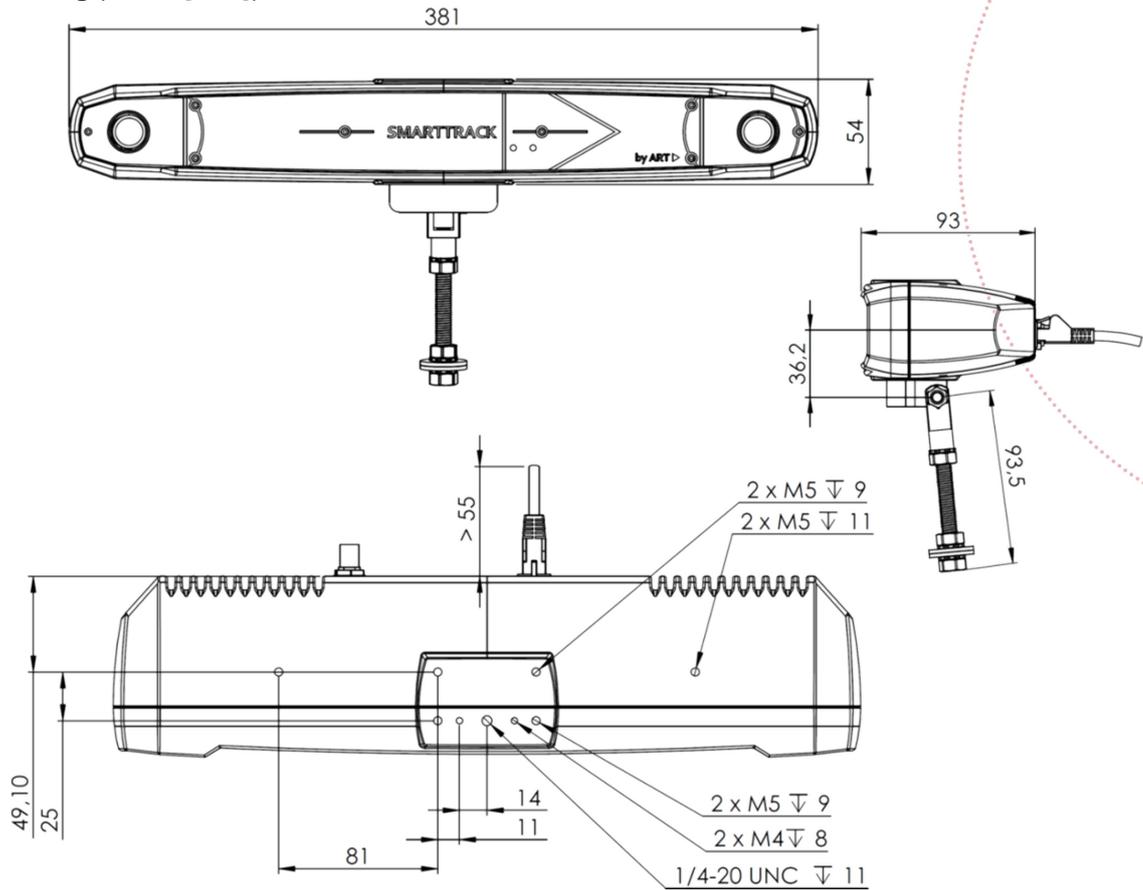
* based on 12 mm spherical passive markers: Higher ranges possible with larger or active markers

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

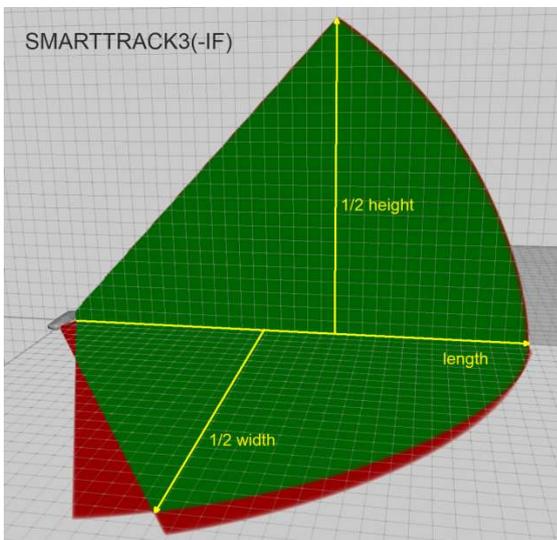
System latency	@ 180Hz	@ 240Hz
4 targets	9ms	6ms

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

Technical Drawing (units: [mm])



Tracking Area



Tracking Area	length	1/2 width	1/2 height
SMARTTRACK3	0.3 - 3.5m	3.0m	1.8m
SMARTTRACK3-IF	0.3 - 2.5m	1.9m	1.0m