SMARTTRACK3/M

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. An optional bandpass filter is available for the SMARTTRACK3/M to increase its robustness against IR light (i.e. Sunlight).

Technical Data

General Camera Data	
Image sensor	1280x1024
Frame rate (sensor)	150 Hz @ full frame, up to 240Hz with reduced tracking volume
Image processing	integrated
IR source	high power LEDs, 850nm, adjustable in intensity (Exempt Group according to IEC62471-1)
Status indicator	2 LEDs; dimmable

Connectors	
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	
Cooling	passive, noiseless
Temperature	0 … 35° C
Relative humidity	5 … 85% (non-condensing)
Power consumption	12 W

Dimensions	
Size (W x H x D)	approx. 280 x 40 x 90 mm
Weight	approx. 1.0 kg

Option
Bandpass filter - excellent suppression of unwanted light / wavelengths

Available lenses and operation modes				
Compatible lenses		**Operation mode**		
		@ 150Hz	**@ 180Hz**	**@ 240Hz**
	Sensor resolution (pixels)	1280x1024	1280x880	1280x660
2.9 mm	FoV (horiz. x vert.) [deg]	135° x 102°	135° x 86°	135° x 62°
	Tracking range*	0.12m – 1.7 m (same with Bandpass Filter)		
3.5 mm	FoV (horiz. x vert.) [deg] Tracking range*	83°x70°	83°x62°	83°x49°
		0.3m – 2.3m		
		0.3m – 2.0m (with bandpass filter)		
* based on 12 mm spherical passive markers: Higher ranges possible with larger or active markers				

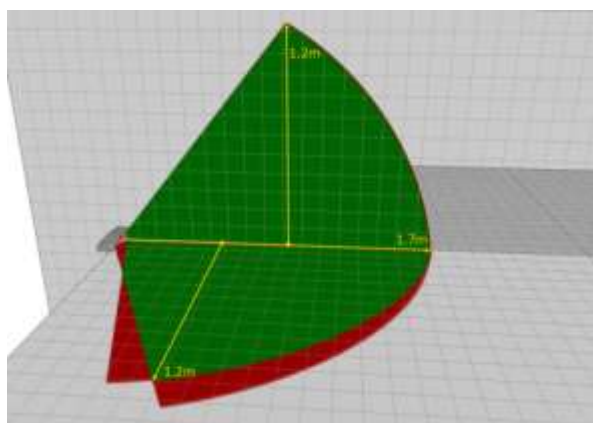| System latency				
4 targets		9ms	8ms	6ms

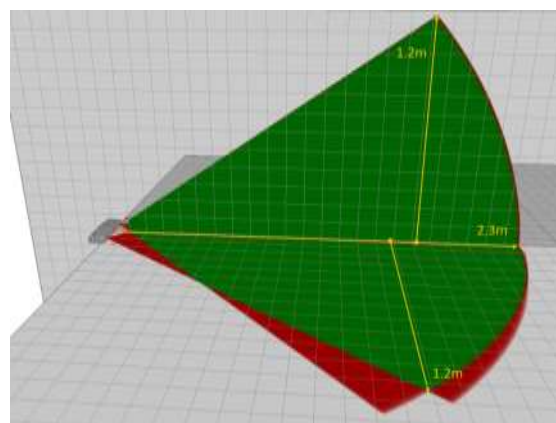| Certifications |
| --- |
| • CE |
| • FCC Part 15 B, Class B |
| • TUEV SUED NRTL |

Technical Drawing

Coverage Area

SMARTTRACK3/M 2.9mm

SMARTTRACK3/M 3.5mm

with Bandpass filter: 0.3m – 2.0m