SMARTTRACK3/M

Plug-and-play tracking for small volumes in a very compact design

The SMARTTRACK3/M is a very compact tracking system designed for small volumes. Two cameras and a controller are integrated into a single housing. Pre-calibrated on delivery, the system is ready for immediate use. The optional SMARTTRACK3/M-IF version is designed for operation under daylight conditions, particularly for in-car tracking.

Technical Specifications

Parameter	Specification
Sensor type	CMOS, global shutter
Sensor resolution	1280 x 1024 pixels, 1.3 MP
Adjustable frame rate	up to 240 Hz
Minimum camera latency	6 ms
Image processing	integrated
IR source	high-power LEDs, 850 nm, adjustable in intensity (exempt group according to IEC 62471-1)
IR filter, standard version	long-pass filter
IR filter, IF version	narrow band-pass filter for improved suppression of stray light and unwanted wavelengths; out-of-band suppression at least 10 times higher than with the standard version; reduced tracking range
Adjustable camera parameters (IF-Version only)	Exposure time and marker-detection threshold adjustable to increase passive-marker detection range under favorable conditions or improve robustness against ambient light and unwanted reflections.
Typical passive-marker detection range	2.3 m[1]
Status indicator	2 status LEDs; brightness adjustable down to complete deactivation
Data interface and power supply	Gigabit Ethernet with PoE according to IEEE 802.3af-2003; cable length up to 100 m using CAT5 or higher
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)
Mounting	ART D2 ceiling mount; 2 × 1/4"-20 UNC mounting threads via adapter
Cooling	passive, fanless
Operating temperature	0 - 35°C
Relative humidity	5 - 85% (non-condensing)
Max. power consumption	12 W
Nominal dimensions, W x H x D	280 x 40 x 90 mm
Weight	approx. 1.0 kg, including lenses, excluding mounting hardware

[1] measured at 180 Hz with an SMARTTRACK3/M equipped with 3.50 mm lenses, using a 12.7 mm passive marker centred in the field of view and default settings

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Am Oeferl 6 82362 Weilheim i. OB Germany T +49 881 92530-00 ar-tracking.de

Camera Configuration

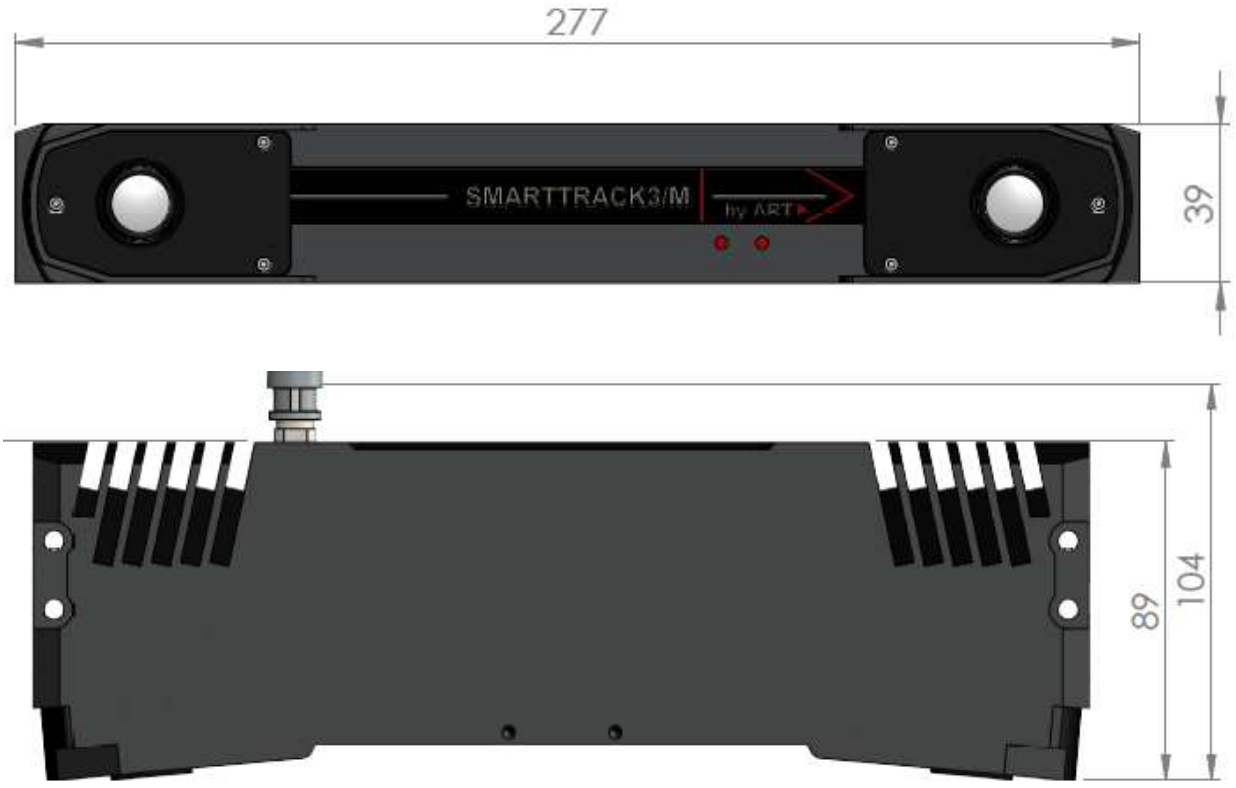
Typical camera operating modes		180 Hz mode	240 Hz mode
Available lens options	Sensor resolution (pixels)	1280 x 1024	1280 x 800
2.86 mm	Field of view H x V (°)	135 x 102	135 x 78
3.50 mm		83 x 70	83 x 56
System latency with 4 targets [ms]		9	6

Certifications

- CE
- FCC Part 15 Subpart B, Class B
- TÜV SÜD NRTL

Technical Drawing

all dimensions shown are nominal in [mm] unless otherwise specified



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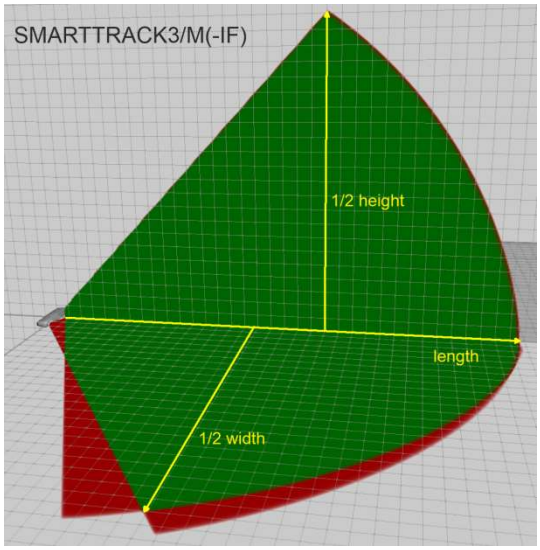
Tracking Area

all dimensions shown are nominal in [m] unless otherwise specified



Tracking Area	lens (mm)	length (m)	½ width (m)	½ height (m)
SMARTTRACK3/M	**2.86**	**0.12 - 1.7**	**1.4**	**1.0**
SMARTTRACK3/M	**3.5**	**0.3 - 2.3**	**0.9**	**0.8**
SMARTTRACK3/M-IF	**2.86**	**0.12 - 1.7**	**1.2**	**0.7**
SMARTTRACK3/M-IF	**3.5**	**0.3 - 2.0**	**0.7**	**0.6**

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