

ART's unique cave cameras are designed specifically for multi-sided projections (e.g. CAVE or I-Space). The camera lenses look through small holes drilled into the corners of the projection screens and make the rest of the tracking system disappear within the virtual landscape.



Technical Data

General Camera Data	
Image sensor	1280 x 1024 Pixel
Frame rate (sensor)	150 Hz @ full frame, up to 300 Hz with reduced field of view
Image processing	integrated
Status indicator	status LEDs (camera body); dimmable
IR source	high power LEDs, 850 nm, adjustable intensity (Exempt Group according to IEC62471-1)
Data transfer, sync and power supply (camera body)	single cable solution; Gigabit Ethernet PoE+ (IEEE 802.3at-2009) via max. 100 m cable (CAT5)
Head of the camera	connected to the camera body via 0.6 – 0.8 m flexible cable (different options available)*
* The head cannot be separated from the cable	
Operating conditions	
Cooling	passive, noiseless
Operating temperature	0 - 38°C
Relative humidity	5 - 85% (non-condensing)
Power consumption	12 W
Dimensions	
Size (W x H x D)	Camera head: length approx. 67 mm, Ø 36.5mm Camera body: approx 100 x 100 x 55 mm
Weight	Camera head: approx. 0.2 kg Camera body: approx. 0.5 kg

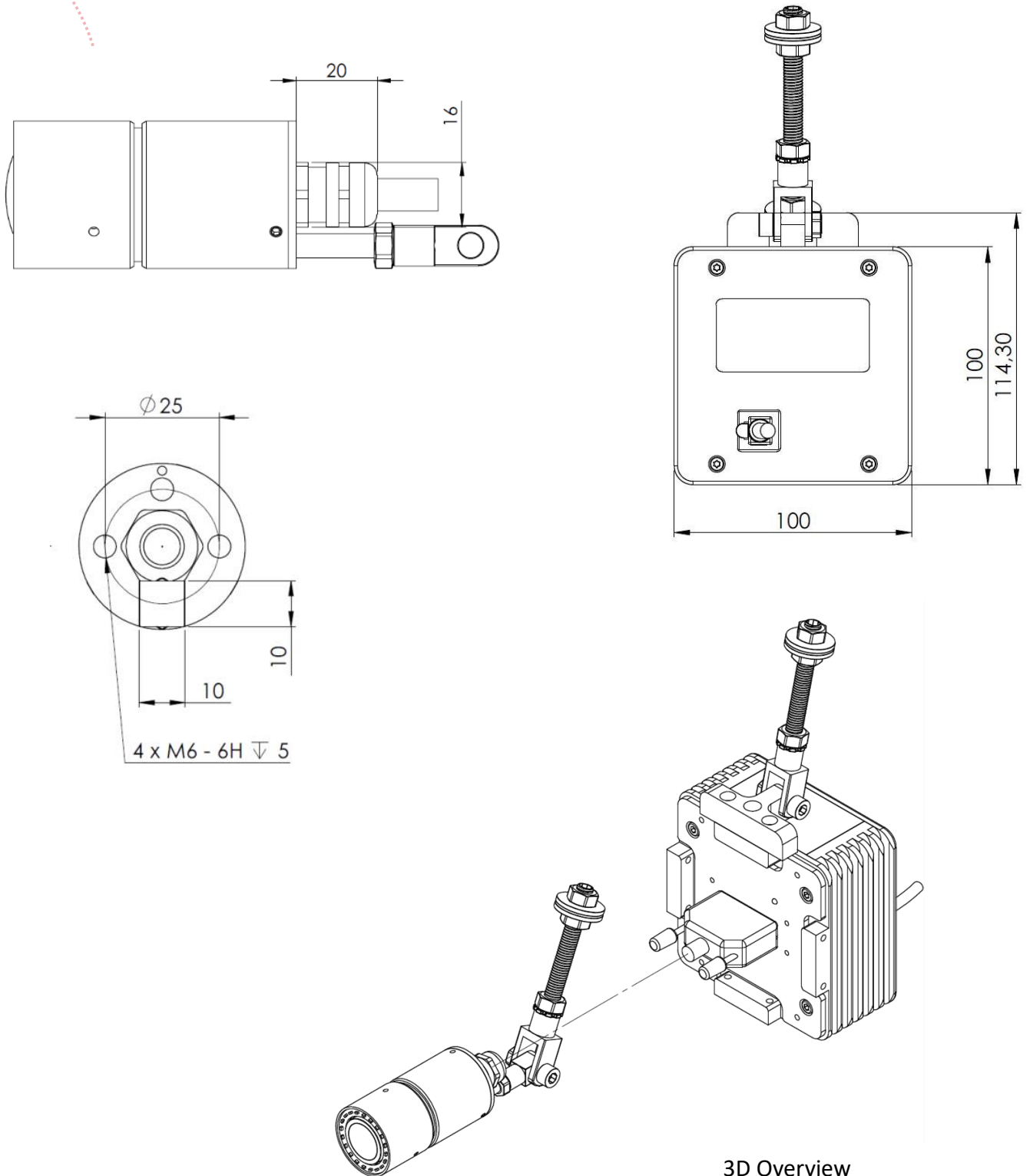
Available lenses and field of view				
Compatible lenses		Operation mode		
		@ 150Hz	@ 240Hz	@ 300Hz
	Sensor resolution (pixels)	1280 x 1024	1024 x 750	800 x 600
4.0mm	Frustum [m ³]	60	22	10
	FoV (horiz. x vert.)	89° x 71°	71° x 52°	56° x 42°
	Max. tracking range [m]**	3	2	1
** based on 12 mm spherical passive markers				

System latency			
4 cameras, 4 targets	Δ = 8.5ms	Δ = 6.0ms	Δ = 4.7ms
4 cameras, 10 targets	Δ = 9.4ms	Δ = 6.9ms	Δ = 5.5ms
8 cameras, 4 targets	Δ = 8.6ms	Δ = 6.1ms	Δ = 4.7ms
8 cameras, 10 targets	Δ = 9.6ms	Δ = 7.1ms	Δ = 5.7ms

Certifications
<ul style="list-style-type: none"> • CE • FCC Part 15 Subpart B, Class A • TÜV SÜD NRTL

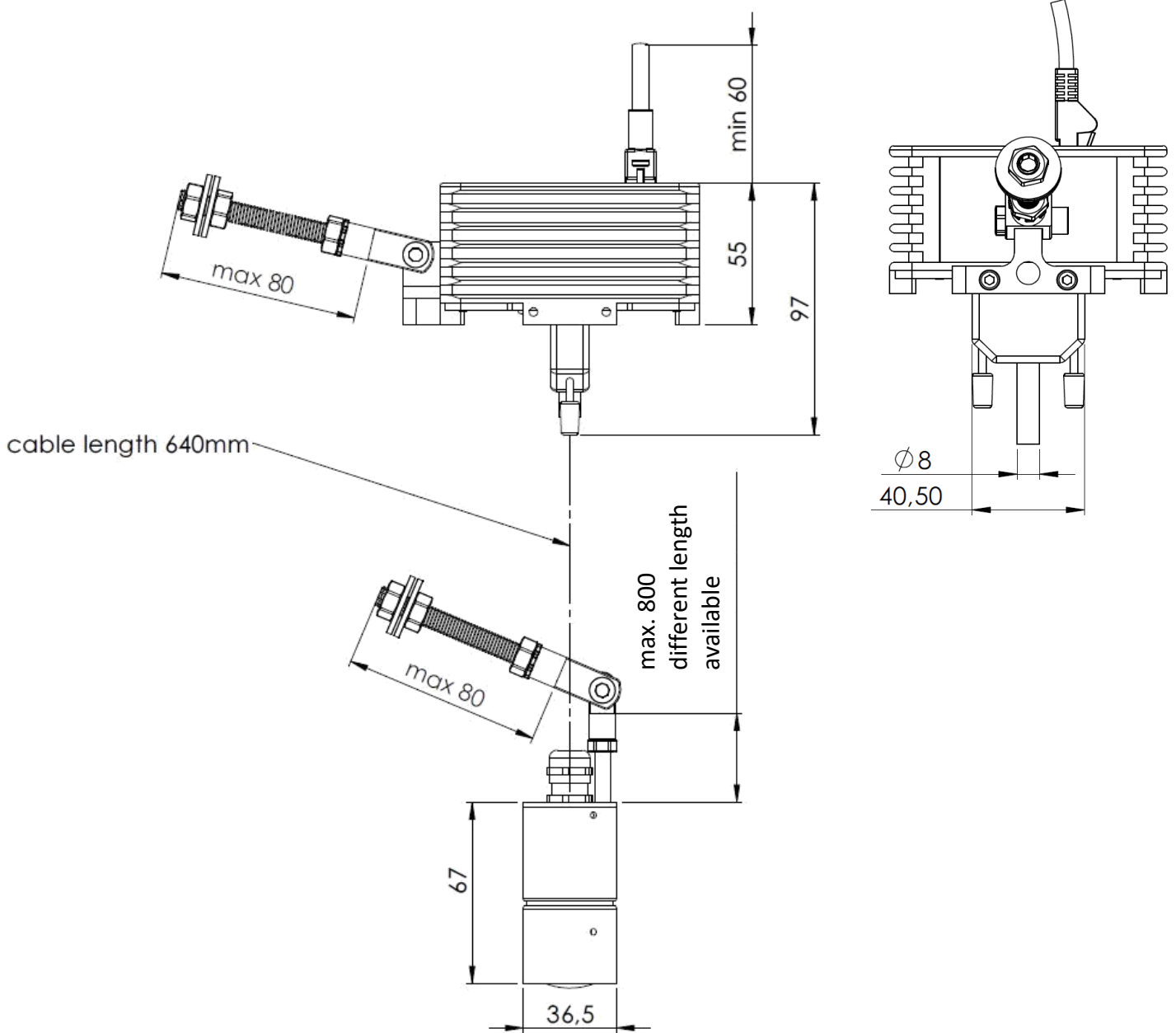
Technical Drawing

all dimensions in [mm] unless otherwise specified

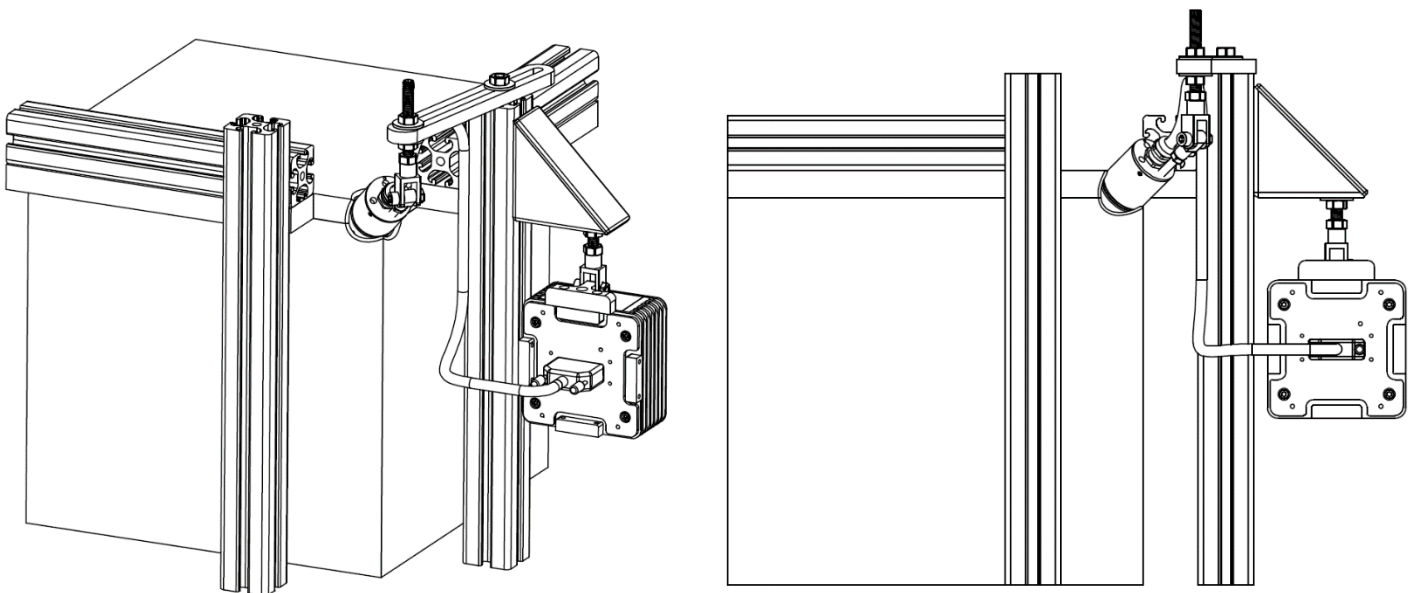
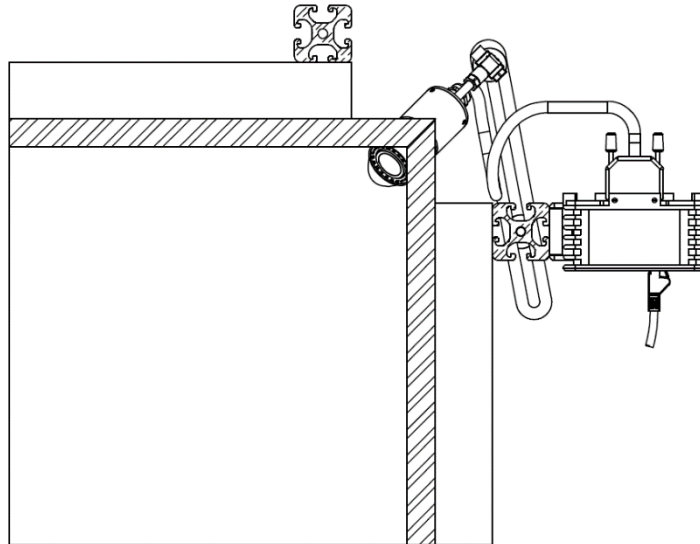


3D Overview

ARTTRACK5/C



Typical installation for CAVE



Buildup-View