SHIPPING · 700+ IN THE FIELD

Mono

A small camera for the wrist that sees what the hands are doing, with its own motion sensor, locked to the rest of the rig.



700+	1920×1200	500 Hz	~1 µs	10+ h
Monos shipped	Global shutter, 30 fps	Motion data in every frame	Median sync between wired cameras	One continuous recording, 30 fps at p99

What it can do

On the wrist
Sees the hand touching the object, which the head camera cannot.

Locks to the rig
Every shutter fires on one trigger, about 1 µs apart.

Motion in every frame
Gyro and accelerometer at 500 Hz, stamped into the video itself.

Global shutter
Fast hands stay sharp, with no rolling smear.

Leader or follower
One Mono can drive the trigger for the whole rig.

Plug and play
Shows up as a normal USB camera on Linux and macOS.

Calibrated out of the box
Lens calibration lives on the camera. Full camera and motion calibration from a phone.

All day, in one take
10+ hours in one stretch, 30 fps at p99.

Picture

Sensor	2.3 MP colour, global shutter (AR0234)
Resolution	1920 × 1200 (also 1920 × 1080, 1600 × 1200)
Frame rate	30 fps
Lens	Wide-angle fisheye, M12 mount
Field of view	Customizable. Base 112° H, 85° V, 120° D
Exposure	250 to 10,000 µs, auto or fixed
Encoding	H.264, H.265 or MJPEG, on the camera
Bitrate	6 Mbit/s default, 4 to 8 adjustable (about 2.8 GB per hour)

Motion

Motion sensor	6-axis gyro and accelerometer
Rate	500 Hz, inside every video frame
Magnetometer	3-axis, 100 Hz

Sync

Hardware sync	Trigger pin, leader or follower
Accuracy	Median about 1 µs between wired cameras
Shutter delay	1,262 µs after the trigger, the same on every camera
Trigger level	1.8 V
Without a wire	Under 0.1 ms between Monos, after a one-time shake calibration

Connection and power

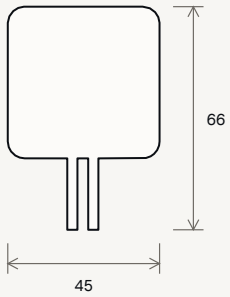
Interface	USB 2.0, standard UVC camera
Power	5 V over USB, about 0.8 W recording
Recording	Streams to the rig receiver, which records to SD
Battery	None, runs from the rig's power bank
Microphone	Built in, 16 kHz mono over USB audio
Longest recording	10+ hours in one stretch, 30 fps at p99

Software and data

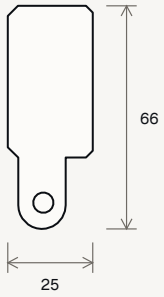
SDK	Python SDK and command line: capture, controls, sensor data, rig sync
Platforms	Linux (with motion data), macOS (live view, controls, calibration)
Outputs	Video, per-frame timestamps, 500 Hz IMU, magnetometer, calibration file

Dimensions

mm, approx.



Front



Side

Physical

Body	approx. 45 × 44 × 25 mm, 66 mm tall with mount
Weight	About 40 to 50 g
Mounting	Wrist cuff, tool or fixture, sides of the six-camera head



Front



Two Monos in a Full Rig

In the box

- Mono camera
- Cable
- Microphone

Good to know

Bring your own SD card and USB power bank when the Mono records through a rig receiver.

Specifications subject to change. Dimensions are measured from our CAD and are approximate.