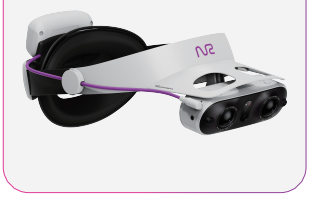
WE DON'T
MAKE ROBOTS.
WE MAKE
THEM INTELLIGENT.

NOITOM ROBOTICS



NR EGO-VISION
DATA ACQUISITION DEVICE

NR Ego-Vision Data Acquisition Device — is Noitom Robotics' next-generation multimodal perception and computing platform for embodied AI. Built around a self-developed headset device, it seamlessly captures first-person human–object–environment interactions while integrating optical, inertial, magnetic tracking, and tactile sensing into a unified spatial-temporal framework. An edge-to-cloud pipeline converts sensor data into high-fidelity digital assets for AI training and real-time robotic interaction.



Overall Appearance & Core Hardware

- Head-mounted and compatible with portable power banks and SD cards
- Head-mounted / 209g (main body) / IP54
- Power, volume, and record start / stop buttons
- Tri-color light * 1, red light * 1



Dual Fisheye RGB Cameras

- Baseline: 64mm
- CIS: 50 MP, effective imaging resolution: 3K (4-in-1), HDR
- Lens: 200° FOV
- Synchronized with other acquisition sensors
- EIS: supported



Quad Monochrome Cameras

- Resolution: 640 x 480
- Horizontal FOV: 151.3°; vertical FOV: 112.7°
- Head movement tracking, depth recognition, and hand motion capture
- Synchronized with other acquisition sensors



UVC RGB Camera

- FOV: 110°
- Resolution: 1080p or higher



Processor, Storage & Connectivity

- Qualcomm XR2 Gen 1 platform
- RAM: 8 GB LPDDR; storage: 256 GB UFS
- Removable storage accessories and SD card support
- Wi-Fi 6 / 6E and Bluetooth 5.2
- Real-time VSLAM pose output
- Hardware-triggered multimodal data synchronization inter-device
- ≤1 ms multi-device sync via 2.4G private protocol



Battery & Other Specs

- The main device features a 1000 mAh battery with up to 30 minutes of full-function operation.
- The power bank extends device operation for up to 8 hours.

Audio & I/O

- Single speaker
- Dual Digital Microphones (40 mm Baseline)
- AEC, dereverberation, ANS, ASR, and TTS
- Full-featured USB-C × 1; data USB-C × 1
- Supports the PTP protocol

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