

LIPSense™ 3D Body Pose SDK

Multi-Person Skeleton & Finger Tracking

Industrial, Commercial and Gaming Use

LIPSense™
3D Body Pose SDK



LIPSense™ S315



LIPSense™ L Series



LIPSense™ AE Series

3D Depth Camera



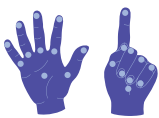
32

Joint full-body skeletal tracking



43

People tracking



40

Joint two-hand skeletal tracking



Swing & staggering Motion



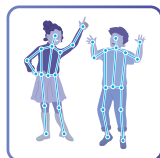
Leading API Wrappers for Integration and Acceleration



Factory Automation



AR & VR



Motion Tracking



Virtual Fence



Animation



Interactive Gaming



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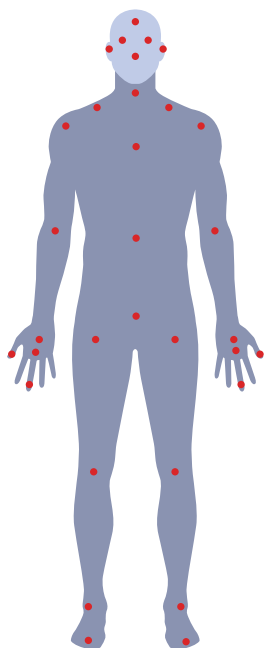
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■ Main Features

■ 32 Body Joints Full-body Skeletal Tracking

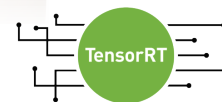


- RGB, Depth and Skeletal Image Output
- 32 Body Joints Tracking Capability

| | | |
|--------------|--------------|----------|
| ▪ Head | ▪ Knee*2 | ▪ Pelvis |
| ▪ Neck | ▪ Hip*2 | ▪ Navel |
| ▪ Nose | ▪ Ankle*2 | ▪ Chest |
| ▪ Clavicle*2 | ▪ Foot*2 | |
| ▪ Elbow*2 | ▪ Eye*2 | |
| ▪ Wrist*2 | ▪ Ear*2 | |
| ▪ Hand*2 | ▪ Hand Tip*2 | |
| ▪ Thumb*2 | ▪ Shoulder*2 | |

- People Tracking up to 43
- Capture of Swinging and Staggering Motions
- Multiple 3D camera mounting Positions
 - 90° Clockwise
 - 90° Counterclockwise
 - 180° Flat
- Detects cameras connected during runtime

■ 20 Joints Tracking (Single Hand)



Specifications

| General | | |
|------------------------------------|---|-------------------------------|
| | Industrial application | General application |
| 3D sensor | LIPSedge™ AE400 / AE450 | LIPSedge™ DL / LIPSedge™ S315 |
| 3D sensor mechanical positions | 90° clockwise / 90° counterclockwise / 180° | |
| Environment | Indoor with sufficient illumination*2 | |
| Detection range | Working range: 2 – 7 m / Optimal range: 3 m | |
| FPS | 30 frames / second | |
| Maximum people tracking capability | Up to 43 people | |
| Maximum joint tracking capability | Up to 72 joints (32 key points in body total, including eyes * 2, ears * 2, nose, head, neck, clavicle joints * 2, shoulders * 2, elbows * 2, wrists * 2, hands * 2, tips of the hands * 2, thumbs * 2, pelvis, chest, navel, hips * 2, knees * 2, ankles * 2, feet * 2 / palm * 40) | |
| Software | | |
| Operating system | Windows 10 / Ubuntu 22.04 LTS/ Ubuntu 24.04 LTS | |
| Programming languages | C / C++ / Python / Unity / C# | |

*1. The people tracking capability for LIPSense™ 3D Body Pose SDK depends on the hardware capacity of the developer's PC / laptop. This feature describes the minimum capability of LIPSense™ 3D Body Pose SDK.

*2. OpenVINO™ is not compatible with NVIDIA Jetson platforms.

System Requirements

| x86 Based Systems | | |
|-------------------------|---|---|
| | Standard version requirements (Lite) | Standard (Full) / Professional version requirements |
| CPU | 6 th Generation Intel® Core™ processor | 8 th generation Intel Core™ processor |
| RAM | 8 GB RAM or above | |
| GPU | NVIDIA RTX 4060 | NVIDIA RTX 4060 Ti |
| Acceleration frameworks | Intel® OpenVINO™ / NVIDIA® TensorRT™ | Standard |
| | | Professional |
| | | Cuda 12.x, cuDNN 9.9.0 |
| | | Intel® OpenVINO™ |
| Arm based systems | | |
| | NVIDIA® Jetson Xavier™ / AGX Orin™ | |



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