

INDUSTRIAL-GRADE INTERACTIVE EMBODIED OPERATION ROBOT

# Engage G2.

## Precision, embodied.

The industrial-grade interactive embodied robot. Sub-millimeter-precision dual arms transform precision assembly and complex tasks — intelligent, flexible and reliable technology that opens new possibilities for humanoid collaboration across industries.



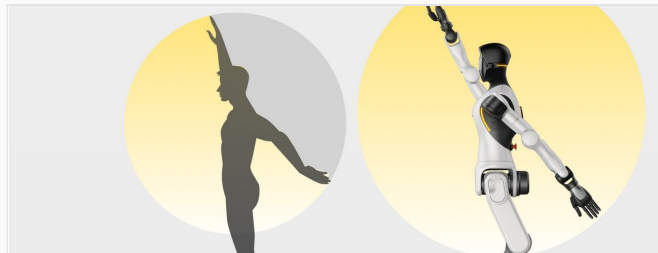
FIG. 01 · ENGAGE G2 FLEET · PRECISION LINE OPERATIONS



## 01 · PERFORMANCE

**Advanced precision performance**

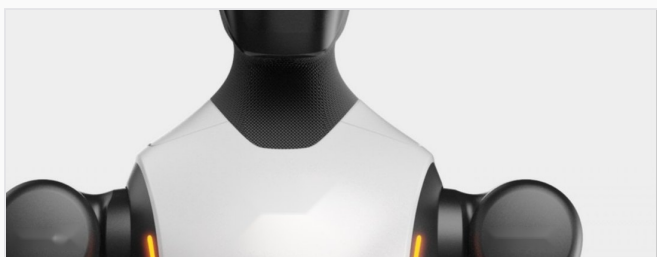
- 100% automotive-grade components for unwavering reliability
- Dual-arm force control precision  $\leq 0.5\text{ N}$  — sub-millimeter accuracy
- NVIDIA Jetson Thor T5000 with up to 2,070 TFLOPS of compute



## 02 · WORKSPACE

**Expanded operational workspace**

- 26-DOF body for human-like motion
- 5-DOF waist-leg system for fluid movement in tight spaces
- 4-wheel steer: in-place rotation, omnidirectional movement, crab-walking



## 03 · INTERACTION

**Multi-modal smart interaction**

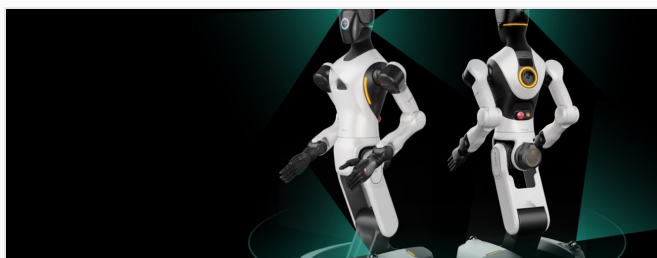
- Continuous multi-speaker dialogue and knowledge-base Q&A
- 1:1 human-like motion



## 04 · TELEOPERATION

**Real-time teleoperation**

- Ultra-low latency for beyond-line-of-sight control
- Binocular stereo vision for intuitive operation
- One operator managing multiple robots via time-sharing



## 05 · SAFETY

**Safety assurance**

- 360° surround view and high-precision arm collision detection
- Hybrid active-passive system protects personnel



## 06 · POWER

**Long-lasting power**

- Hot-swappable dual batteries for 24/7 continuous operation
- Autonomous return-to-charge with rapid full-power recovery

HEAD RGB-D CAMERA  
Depth perception

STEREO CAMERA  
Depth video capture

NECK  
Roll · Pitch · Yaw

COMPUTING PLATFORM  
NVIDIA Jetson T5000 · 2,070 TFLOPS (FP4)  
HUIXI R1 · 500 TOPS (INT8)

WRIST RGB-D CAMERA  
Depth perception

DEXTEROUS HAND · OPTIONAL  
Up to 19 DOF · 3D tactile sensing · Quick replacement

WAIST & LEGS  
Waist joint ×3 · Leg joint ×2

CHASSIS  
1.5 m/s · In-place rotation · Omnidirectional



MICROPHONE ARRAY  
Sound-source localization · Noise reduction & echo cancellation

FISHEYE CAMERA ARRAY  
360° surround view

SPEAKER  
8 W

NETWORK PORT  
10G

7-DOF ARM  
5 kg payload · Full joint torque sensing

LIDAR ×2  
360° coverage

BATTERY ×2  
Hot-swappable · Automatic recharging

1. Schematic for reference only; actual product may vary. 2. End-effectors (e.g., dexterous hand, precision picker) are optional extras.

# Developer-friendly ecosystem.

A complete software stack ships with every Engage G2 — from rapid deployment tooling to a generalist embodied foundation model.

01

### Genie RL Toolkit

Rapid deployment and model switching with minimal demonstration.

02

### GDK · Genie Development Kit

Rapid development, deployment and optimization of Engage robotic applications and functionality.

03

### Engage World

Million-scale real-machine open-source dataset.

04

### Genie Operator-1

An innovative generalist embodied foundation model.

05

### Genie Envisioner

A unified world foundation platform for robotic manipulation.

06

### Secondary Development

Full GDK access with DDS, ROS 2, Python and C++ interfaces.

# Applications.

