

Génération ROBOTS

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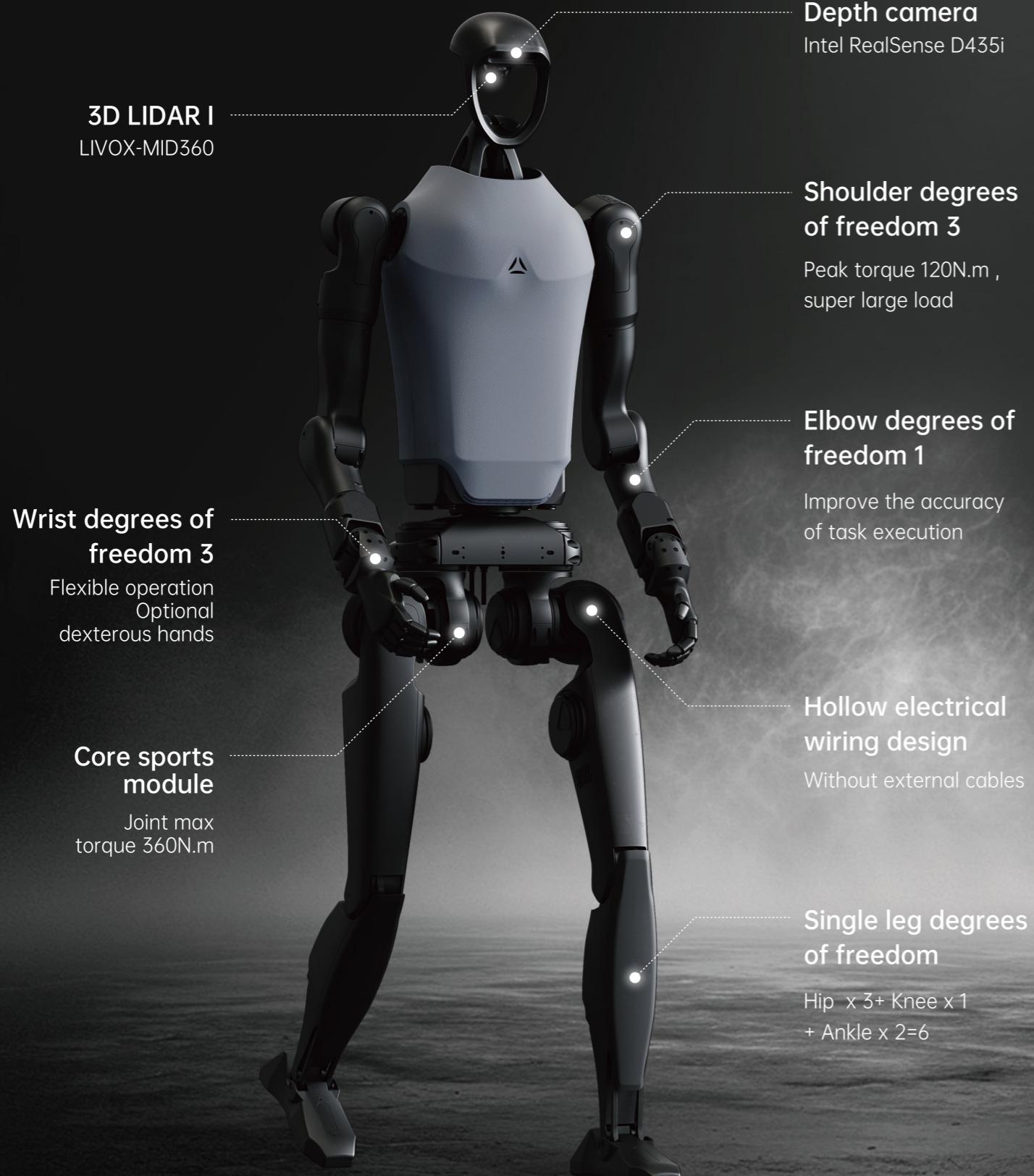
UNITREE

Unitree's First Universal
Humanoid Robot

H1 Series



Unitree H1-2 Parameter

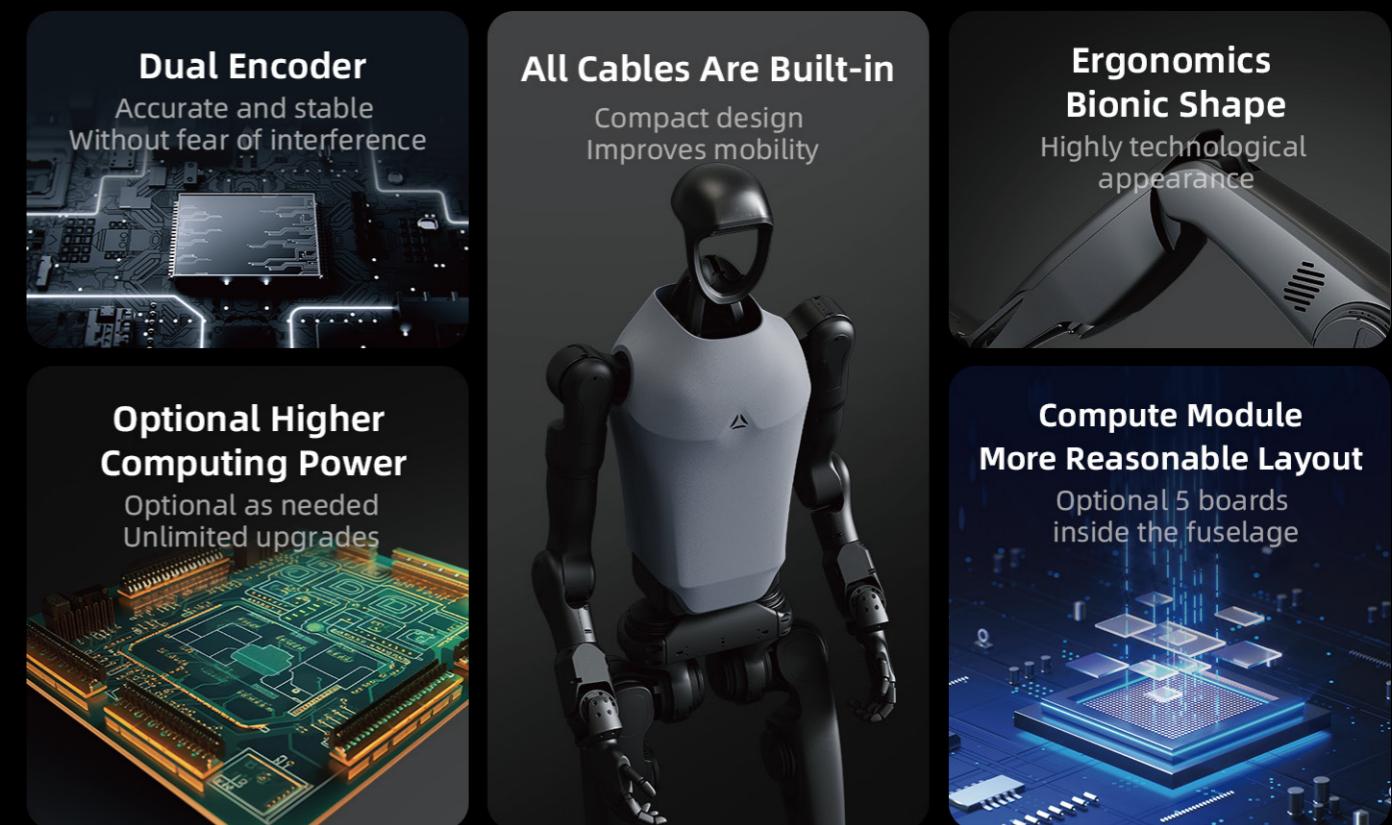


Unitree H1-2

Full-size Universal Humanoid Robot

| | | |
|---------------------------|--------------------------------|---------------------|
| Body Size Value | 360° Depth Sensing | Degree of freedom |
| Height about 178CM | 3D LIDAR + Depth Camera | 27 |
| Weight about 70kg | | |
| Max Torque of Arm Joint | Max Torque of Leg Joint | Peak Torque Density |
| 120N.m | 360N.m | 189N.m/Kg |

H1-2 Highlight Exploration



Unitree H1 Parameter



Unitree H1

Full-size universal humanoid robot

Body Size Value

Height about 180CM
Weight about 47kg

360° Depth Sensing

3D LIDAR + Depth Camera

Mobility

Moving speed of 3.3m/s
Potential mobility > 5m/s

Endurance

Battery capacity: 864Wh, quickly replaceable

Max Joint Torque

360N.m

Peak Torque Density

189N.m/Kg

The most powerful universal humanoid robot of its counterparts with similar specifications in the world.

The advanced powertrain provides the highest level of speed, power, maneuverability and flexibility.



The first full-size universal humanoid robot in China that can run and do backflips

Possessing a stable gait and highly flexible movement capabilities, it is able to walk and run autonomously in complex terrains and environments.



Unitree M107 Joint Motor

Ultrastrong power performance, significantly improved in terms of agility, speed, load capacity, endurance, and more.



M107 PK International mainstream joint motor

| Product | M107 | T-1 | T-2 |
|--|------------|-----------|----------|
| Max torque OR pulling force (3.5cm arm equivalent) | 360N.m | 180N.m | 8000N |
| | 10000N | | |
| Weight | 1.9kg | 2.26kg | 2.2kg |
| Max Torque/ Tension/Weight Ratio | 189 / 5263 | 79 | 3636 |
| Hollow shaft | YES | YES | - |
| Dual Encoder | YES | YES | YES |
| Dimensions(mm) | 107 × 74 | 100 × 130 | 60 × 180 |

Parameter

| Model | H1 | H1-2 |
|--|---|---|
| Picture | | |
| Key Dimensions | (1520+285)mm × 570mm × 220mm | (1503+285)mm × 510mm × 287mm |
| Thigh and Calf Length | 400mm × 2 | 400mm × 2 |
| Total Arm Length | 338mm × 2 | 685mm |
| DOF of Each Leg | 5 (Hip × 3 + Knee × 1 + Ankle × 1) | 6 (Hip × 3 + Knee × 1 + Ankle × 2) |
| DOF of Each Arm | 4 (Expandable) | 7 (Shoulder × 3 + Elbow × 1 + Wrist × 3) |
| Total Weight | About 47kg | About 70kg |
| Joint output bearing | Industrial grade crossed roller bearings (high precision, high load capacity) | Industrial grade crossed roller bearings (high precision, high load capacity) |
| Core Joint motor | Low inertia high-speed internal rotor PMSM (permanent magnet synchronous motor, better response speed and heat dissipation) | Low inertia high-speed internal rotor PMSM (permanent magnet synchronous motor, better response speed and heat dissipation) |
| Ultimate Torque of Joint Unit | Knee Torque About 360N.m, Hip Joint Torque About 220N.m, Ankle Torque About 59N.m, Arm Joint Torque About 75N.m | Knee Torque About 360N.m, Hip Joint Torque About 220N.m, Waist Joint About 220N.m, Ankle Joint About 75x2N.m. |
| Mobility | Moving speed of 3.3m/s, Potential mobility > 5m/s | Moving speed < 2m/s |
| Battery | Battery capacity 15Ah(0.864KWh), Max Voltage 67.2V | Battery capacity 15Ah(0.864KWh), Max Voltage 67.2V |
| Control and Perception Computing Power | Standard configuration: Intel Core i5(Platform Function), Intel Core i7(User Development) Optional Configuration: Intel Core i7 or Nvidia Jetson Orin NX | Standard configuration: Intel Core i5(Platform Function), Intel Core i7(User Development) Optional Configuration: Intel Core i7 or Nvidia Jetson Orin NX (up to three) |
| Sensor Configuration | 3D LIDAR + Depth Camera | 3D LIDAR + Depth Camera |
| Dexterous Hand | Optional (in development) | Optional RH56 or other ambidextrous hands |
| Arm joint performance (peak torque) | / | Shoulder: About 120N.m, Elbow: About 120N.m Wrist: About 30N.m |
| Arm normal load | / | Peak: About 21Kg; Rated: About 7Kg |

*Note: The product continues to iterate and optimize, please refer to the actual receipt of the goods prevail.

*The appearance of the shipping version may be different from that of the official website version. If you are concerned about the appearance details, please communicate with the sales staff before purchasing.

*There are parameter differences between different products, please choose according to your needs.

*This product is a civilian robot. We kindly request that all users refrain from making any dangerous modifications or using the robot in a hazardous manner.

*Please visit Unitree Robotics Website for more related terms and policies, and comply with local laws and regulations.