

UNITREE G1

HUMANOID AGENT AI AVATAR



getcomex.com.br/inteligenciaartificial/

FLEXIBILIDADE SEM LIMITES

Espaço de movimento articular extra grande, 23 a 43 motores articulares.



IMITAÇÃO E APRENDIZAGEM POR REFORÇO

Tecnologia robótica acelerada por IA, evoluindo e se aprimorando diariamente.



MÃO HÁBIL COM CONTROLE DE FORÇA E MANIPULAÇÃO PRECISA

Controle híbrido força-posição, sensível e confiável, simulando mãos humanas para operações precisas de objetos.

**Parâmetros: Polegar: 3 graus de liberdade ativos, Indicador: 2 graus de liberdade ativos e Médio: 2 graus de liberdade ativos.*



MODELO MUNDIAL DE ROBÔ, VAMOS CRIÁ-LO JUNTOS

UnifoLM (Unitree Robot Unified Large Model) – Criando juntos uma nova era da inteligência.

**Aberto para co-criação e uso no futuro.*



O INÍCIO DA NOVA ERA



DIMENSÕES E ESPECIFICAÇÕES

Peso:
Aproximadamente

35 kg

Altura:
Aproximadamente

130 cm



GRAU DE LIBERDADE TOTAL

≤ **43** peças



TORQUE MÁXIMO DA ARTICULAÇÃO

120 N.m





PERCEÇÃO 360°

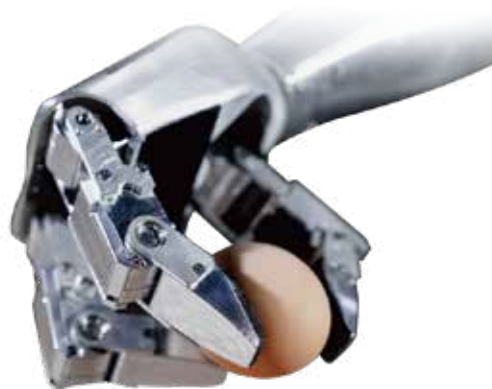
3D LIDAR + Câmera
de profundidade



MÃO DEXTRA DEX3-1

Controle de força
de 3 dedos

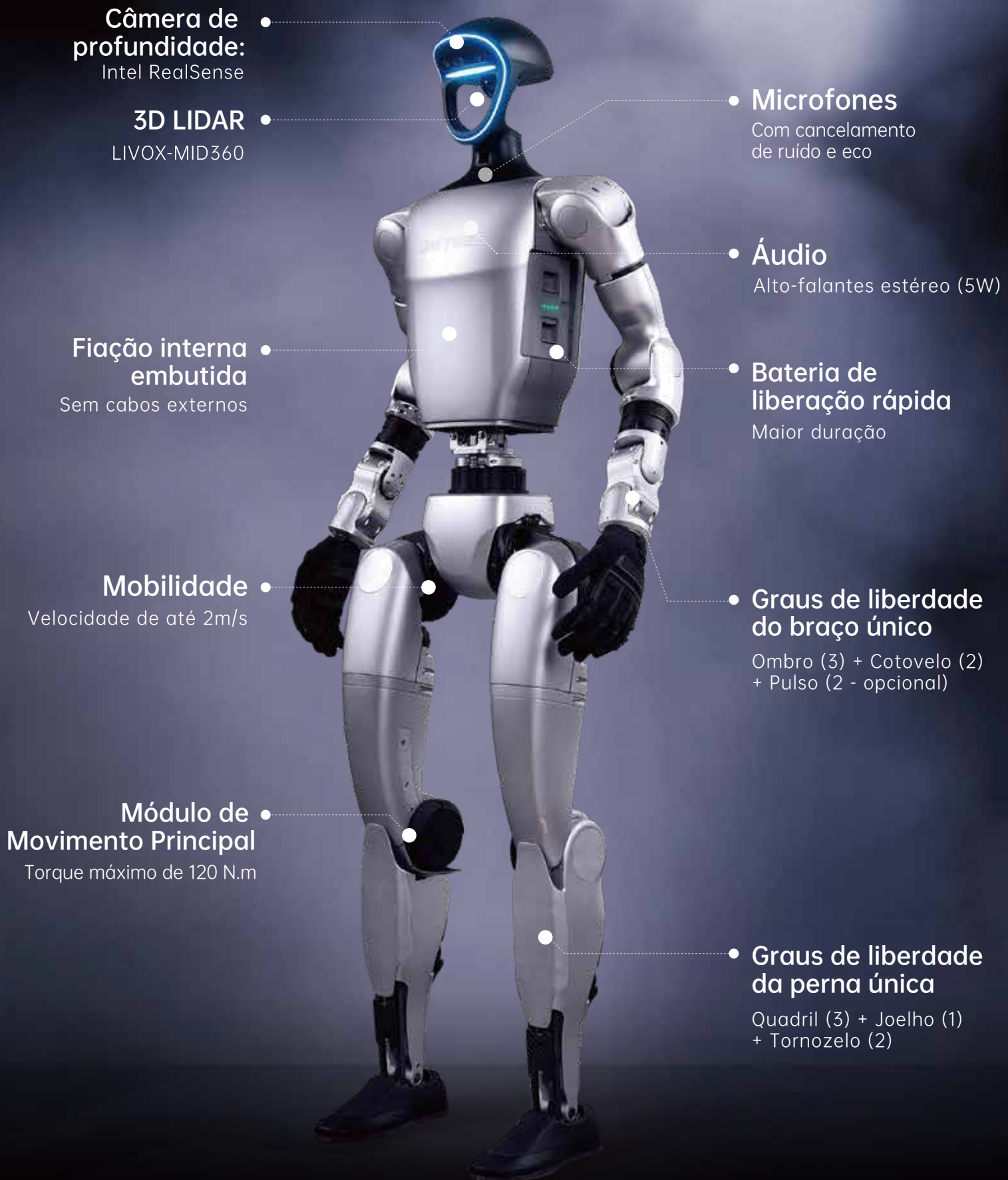
(Opção para sensores táteis)



AUTONOMIA DA BATERIA

Cerca de **2** h

Parâmetros do Unitree G1



Câmera de profundidade:
Intel RealSense

3D LIDAR
LIVOX-MID360

Fiação interna embutida
Sem cabos externos

Mobilidade
Velocidade de até 2m/s

Módulo de Movimento Principal
Torque máximo de 120 N.m

• **Microfones**
Com cancelamento de ruído e eco

• **Áudio**
Alto-falantes estéreo (5W)

• **Bateria de liberação rápida**
Maior duração

• **Graus de liberdade do braço único**
Ombro (3) + Cotovelo (2) + Pulso (2 - opcional)

• **Graus de liberdade da perna única**
Quadril (3) + Joelho (1) + Tornozelo (2)

Model	G1	G1 EDU
Size (Stand)	1320mmx450mmx200mm	1320mmx450mmx200mm
Size (Fold)	690mmx450mmx300mm	690mmx450mmx300mm
Weight (With Battery)	About 35kg	About 35kg+
Total Degrees of Freedom (Joint Freedom)	23	23~43
Single Leg Degrees of Freedom	6	6
Waist Degrees of Freedom	1	1+(Optional 2 additional waist degrees of freedom)
Single Arm Degrees of Freedom	5	5
Single Hand Degrees of Freedom	/	7 (Optional Force control of three-fingered hand) +2 (Optional 2 additional wrist degrees of freedom) *Three-fingered dexterous hand Dex3-1 Parameter: The thumb has 3 active degrees of freedom; the index finger has 2 active degrees of freedom; the middle finger has 2 active degrees of freedom. **Dex3-1 can optionally be installed with tactile sensor arrays
Joint Output Bearing	Industrial grade crossed roller bearings (high precision, high load capacity)	Industrial grade crossed roller bearings (high precision, high load capacity)
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)
Max Torque of Knee Joint 【1】	90N.m	120N.m
Arm Max Load 【2】	About 2Kg	About 3Kg
Calf + Thigh Length	0.6M	0.6M
Arm Span	About 0.45M	About 0.45M
Extra Large Joint Movement Space	Waist joint: $Z\pm 155^{\circ}$ Knee joint: $0\sim 165^{\circ}$ Hip joint: $P\pm 154^{\circ}$ 、 $R-30\sim +170^{\circ}$ 、 $Y\pm 158^{\circ}$	Waist joint: $Z\pm 155^{\circ}$ 、 $X\pm 45^{\circ}$ 、 $Y\pm 30^{\circ}$ Knee joint: $0\sim 165^{\circ}$ Hip joint: $P\pm 154^{\circ}$ 、 $R-30\sim +170^{\circ}$ 、 $Y\pm 158^{\circ}$ Wrist joint: $P\pm 92.5^{\circ}$ 、 $Y\pm 92.5^{\circ}$
Full Joint Hollow Electrical Routing	YES	YES
Joint Encoder	Dual Encoder	Dual Encoder
Cooling System	Local Air Cooling	Local Air Cooling
Power Supply	13 String Lithium Battery	13 String Lithium Battery
Basic Computing Power	8-Core High-Performance CPU	8-Core High-Performance CPU
Sensing Sensor	Depth Camera+3D LiDAR	Depth Camera+3D LiDAR
4 Microphone Array	YES	YES
5W Speaker	YES	YES
WiFi 6 、 Bluetooth 5.2	YES	YES
High Computing Power Module	/	NVIDIA Jetson Orin
Smart Battery (Quick Release)	9000mAh(421Wh)	9000mAh(421Wh)
Charger	54V 5A	54V 5A
Manual Controller	YES	YES
Battery Life	About 2h	About 2h
Upgraded Intelligent OTA	YES	YES
Secondary Development 【3】	/	YES
Warranty Period 【4】	8 months	1 year

[1] The maximum torque of the joint motors of the whole machine is different. This is the maximum torque of the largest joint motor among them.

[2] The maximum load of the arm varies greatly under different arm extension postures.

[3] For more information, please read the secondary development manual.

[4] For more detailed warranty terms, please read the product warranty brochure.

[5] The above parameters may vary in different scenarios and configurations, please subject to actual situation.

[6] The humanoid robot has a complex structure and extremely powerful power. Users are asked to keep a sufficient safe distance between the humanoid robot and the humanoid robot. Please use with caution

[7] If any change in the appearance of the product, please refer to the actual product.

[8] Some sample functions on this page are still being developed and tested, and will be opened to users in the future.

※ 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.

UNITREE

TO PROMOTE THE WORLD WITH SCIENCE AND TECHNOLOGY

Unitree Robotics



GET COMEX[®]

INOVAÇÃO PARA O PRESENTE E FUTURO COM A GET COMEX

Import and Export Services

getcomex.com.br/inteligenciaartificial/