UNITREE Go2

New Creature of Embodied AI

New and Improved
Returning with Glory

Infinite Revolution

Standard Ultra-wide 4D LIDAR Upgrades Recognition System by 200%

Go2 features with Unitree's self-developed 4D LIDAR L1 with 360° x90° hemispherical ultra-wide recognition, super small blind spot and a minimum detection distance as low as 0.05m, which makes Go2 realize all-terrain recognizing.

360°×90°
Ultra-wide Scanning

0.05m
Blind Spot
(Radar accuracy decreases at close range detection)

20m
@90% Reflectivity

21600 points/s
Effective Frequency

43200 points/s
Frequency of Sample

100Klux
Anti-highlight Protection

※Laser Safety Class: Class 1(IEC60825-1:2014) Laser Safety

Your New Intelligent Friend

Tracking Module
Remote-controlled or
automatic tracking

Front Camera
Image tansmission Resolution 1280*720
FOV 120 °
Ultra wide angle lens deliver rich clarity

Front Lamp
Brightly lights the
way ahead

Intercom Microphone
Effective communication with
no scenario restrictions

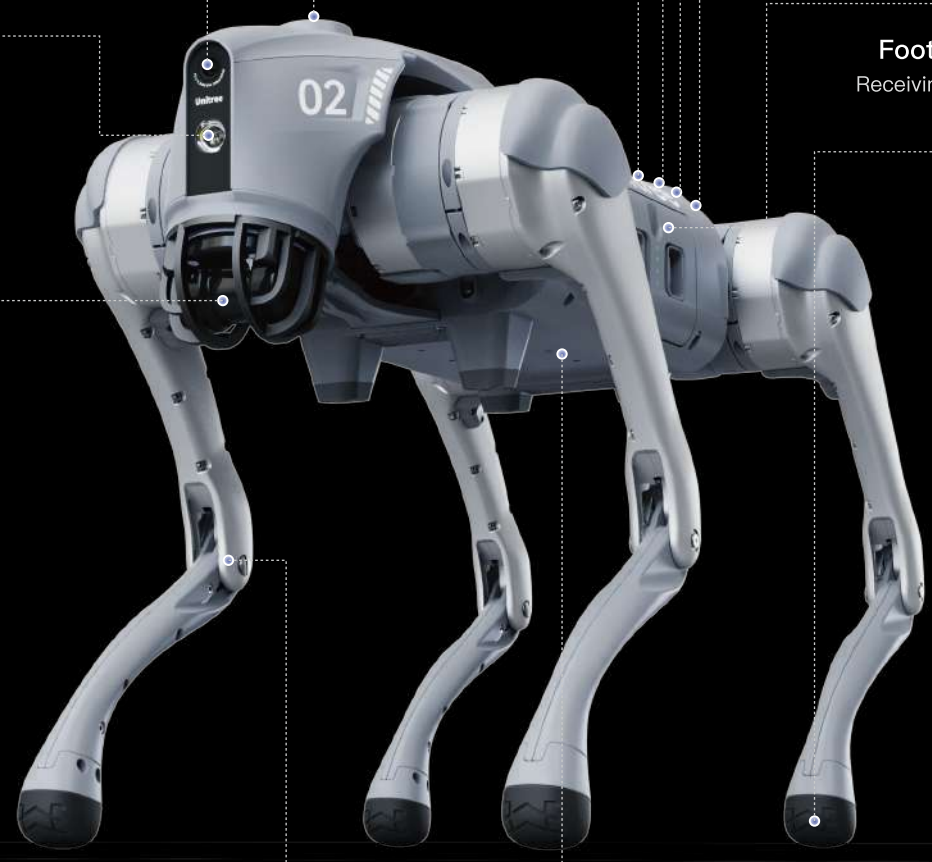
Self-retracting Strap
Easy to carry and
load things

Powerful Core
·Motion controller
High-performance ARM processor
·Improved AI algorithm processor
External ORIN NX/NANO

Hardware Upgrade
·3D LIDAR
·4G ESIM Card
·WiFi6 with Dual-band
·Bluetooth 5.2
for stable connection
and remote control

Smart Battery
Standard 8000m Ah battery
Long-endurance 15000m Ah battery
Protection from over-temp,
overcharge and short-circuit

Foot Force Sensor
Receiving foot perception
in real time



4D LiDAR L1
360°*90° omnidirectional
ultra-wide-angle scanning allows
automatic avoidance with small blind
spot and stable operation

12 Knee Joint Motors
Strong and powerful
Beautiful and simple
Brandy new visual experience

Speaker for Music Play
listen to music as your pleasure

New Intelligence——Unitree Go2

Intelligent Side-follow System 2.0

By adopting the new wireless vector positioning and control technology, the positioning accuracy is technically upgraded by 50%, the remote control distance is over 30m[1], and combined with the optimised obstacle avoidance strategy, it can make the robot better traverse complex terrain.

[1] In open spaces with no shelter

Motor performance enhanced by 30%

Go2 boasts a peak joint torque of 45N.m[2], a new internal trace connecting technique, and heat pipe coolers to decrease temperature effectively.

[2] The maximum torque in the table refers to the maximum torque of the largest joint motor; the actual maximum torque varies for the 12 joint motors.

Battery capacity and endurance upgraded by 150%

Go2 is equipped with a battery capacity increased to 8,000mAh, as a 15,000mAh ultra-long life battery is optional, and a voltage increased to 28.8V to improve motor efficiency, power and stability.

Various actions and poses

Go2 boasts a variety of poses such as jumping, stretching, shaking hands, cheering, pouncing, and sitting down.

Intelligent Interaction

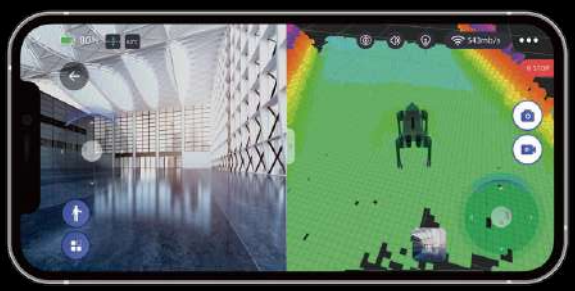
Have great fun with the APP

Intelligent Avoidance
Precise and Agile

Equipped with 4D LiDAR L1, the robodog de–tects, captures and draws the 3D real world for user.

Graphical Programming
Simple Yet Smarter

Optimise the graphical programming function, make it easy to complete the program design by simple drag, drop and connection.Make pro–gramming beginners easy to start and innovate.



Hd Picture Quality
Real–time and Stable [1]

A new App realizes HD image transmission and real–time remote monitor.Built–in 4G and eSIM enables more stable connection and remote control.

[1]Transformation and quality varies considerably in different network environments.

OTA Upgrades

Keep Improving and Evolving to be Smarter

With user authorisation, the robot automatically connects to a cloud–based OTA service to up–grade its own programs to continuously im–prove the user experience.

Parameters

	Type	AIR	PRO	EDU
Mechanical & Electron	Stand Height	70×31×40cm		
	Weight (With Battery)	About 15kg		
	Material	Aluminium alloy + High strength engineering plastic		
	Voltage	28V~33.6V		
	Peaking Capacity	About 3000W		
Performance	Payload	≈7kg（MAX ~ 10kg）	≈8kg（MAX ~ 10kg）	≈8kg（MAX ~ 12kg）
	Speed	0~2.5m/s	0~3.5m/s	0~3.7m/s（MAX~5m/s）
	Max Climb Drop Height	About 15cm	About 16cm	
	Max Climb Angle	30°	40°	
	Basic Computing Power	○	8-core High-performance CPU	
Joint	Peak Joint Torque [1]	○	About 45N.m	
	Range of Motion	Body：-48~48°	Thigh：-200°~90°	Shank：-156°~-48°
	Intra-joint Circuit (knee)	●	●	●
	Joint Heat Pipe Cooler	●	●	●
Force Sensor	Super-wide-angle 3D LIDAR	●	●	●
	Wireless Vector Positioning Tracking Module	○	●	●
	HD Wide-angle Camera	●	●	●
	Foot-end Force Sensor	○	○	●
Feature List	Basic Action	●	●	●
	Auto-scaling Strap	○	●	○
	OTA Upgrades	●	●	●
	RTT2.0 Image Transmission	●	●	●
	Graphical Programme	●	●	●
	Front Lamp	●	●	●
	WiFi6 with Dual-band	●	●	●
	Bluetooth 5.2/4.2/2.1	●	●	●
	4G	○	●	●
	Voice Function [2]	○	●	●
	ISS 2.0	○	●	●
	Intelligent Detection and Avoidance	●	●	●
	Charging Pile Compatibility	○	○	●
	Secondary Development [3]	○	○	●
Accessories	Handheld Controller	Optional		Standard
	Docking Station	○		Optional Nvidia Jetson Orin
	Smart Battery	Standard（8000mAh）		Long endurance（15000mAh）
	Endurance	About 1-2h		About 2-4h
	Charger	Standard（33.6V 3.5A）		Fast charge（33.6V 9A）

※The above parameters may vary in different scenarios and configurations, please subject to actual situations.
If any change in the appearance of the product, please refer to the actual product.
※ 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.
[1] The maximum torque in the table refers to the maximum torque of the largest joint motor; the actual maximum torque varies for the 12 joint motors.
[2] Voice functions include offline voice interaction, commands, intercom and music play.
[3] For more information, please read the secondary development manual.

Extensions

XT16 LIDAR

Model	XT16
Size (Without Bracket)	Φ100.0 / 103.0 mm*76mm
Voltage Range	9–36V DC
Laser Wavelength	905nm
Fov	Horizontal 360°, Vertical 30° (–15°~+15°)

MID360 LIDAR

Model	MID–360
Size (without bracket)	65mm*65mm*60mm
Voltage range	9–27V DC
Laser wavelength	905nm
FOV	Horizontal 360°, Vertical–7°~52°

Depth Camera

Model	D435i
Size	124mm*29mm*26mm
Min Depth Distance	0.105m
Depth Image Resolution	1280*720 @ 30fps; 848*480 @ 90 fps
Depth Field Of View	86° * 57° (±3°)

Docking Station

Model	Orin Nano 8GB、Orin NX 16GB
Voltage range	16–60V DC
Computing power	Nano supports up to 40 Tops NX supports up to 100 Tops
Expansion interface	USB3.0–Type A X1 USB3.0–Type C X1、USB2.0–Type C X1 Gigabit Ethernet port (standard RJ45) X2 100Gb Ethernet (GH1.25–4PIN) X1 M8 Air Plug Interface X1

D1 Servo Mechanical Arm

Model	D1
Weight	About 2.37kg
Degree Of Freedom	6
Playload	About 500g
Max Armspan	670mm (with jaws)
Repeated Positioning Accuracy	About 0.2 cm
Power Requirement	24V 2.5A (MAX 5A)
Interface	DC5.5–2.1
Motor Type	Servo
Power	60W
Control Interface	Control communication interface RJ45 (ETH)

Remote Controller (screen+cameras)

Number of cameras	2
Camera Resolution	1920x1080
Wireless frequency	2.4GHz
Searchlight Power	30W
Horn power	30W
Alarm light	Red and blue sharp–flash
Remote control with screen	MK15

UNITREE

Unitree Robotics

Web: unitree.com.tr
Tel: 0216 652 2300
Email: info@prosmt.com

@UnitreeTurkiye