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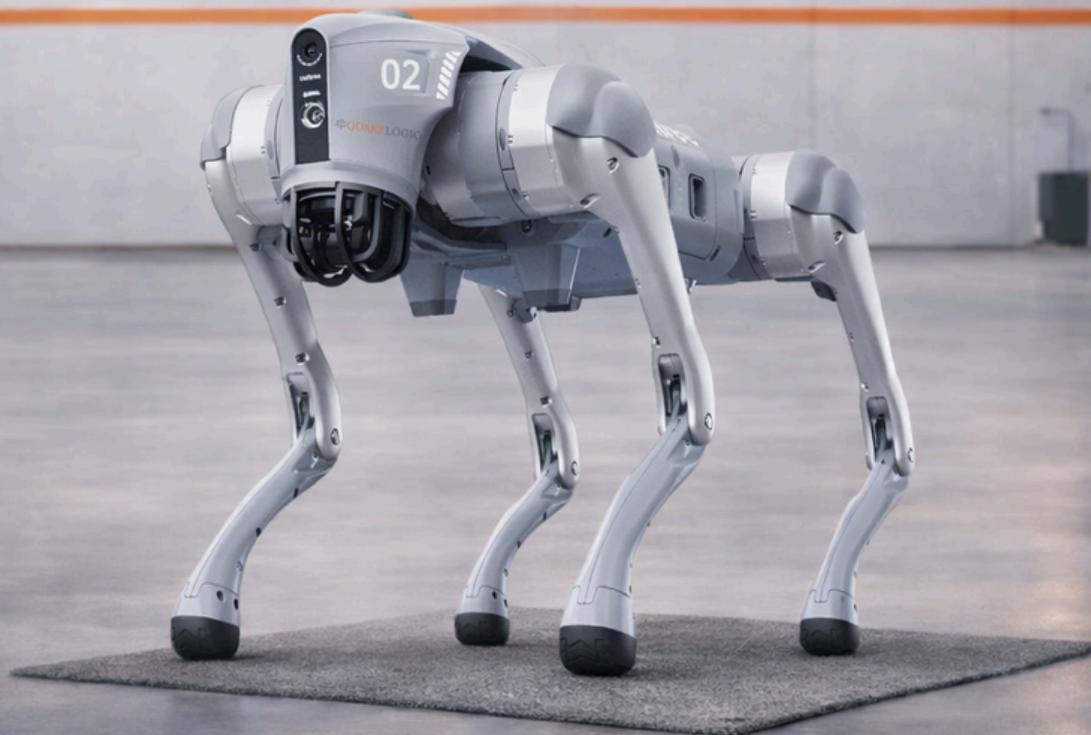
QL-Unitree Go2 EDU+

QUADRUPED ROBOTIC PLATFORM

WITH HESAI XT16 3D LIDAR

QL-Unitree Go2 EDU+

QUADRUPED ROBOTIC PLATFORM

The QL-Unitree Go2 EDU+ Quadruped Robotic Platform with Hesai XT16 3D LiDAR is a four-legged robotic platform designed for advanced robotics development, autonomous perception research, AI experimentation, and educational use. The platform combines quadruped mobility, onboard high-performance computing, 3D LiDAR sensing, visual sensing, wireless connectivity, and secondary development support in a compact mobile research system.

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Core Configuration

Core Configuration

- Main CPU: 8-core high-performance processor
- High Computing Power Module: NVIDIA Jetson Orin NX 16GB, 100 TOPS
- Secondary Development Support: Supported
- 3D LiDAR: Hesai XT16 3D LiDAR
- Front Camera: HD camera, 1280 × 720
- Front Camera Lens: Ultra wide-angle, 120° FOV
- Manual Remote Control: Included
- 4G Module: Included
- Foot-End Force Sensor: Included
- Wireless Vector Positioning Tracking Module: Included

Chassis and Structure

- Dimensions (Standing): 70 × 31 × 40 cm
- Dimensions (Crouching): 76 × 31 × 20 cm
- Weight (with Battery): 15 kg
- Materials: Aluminum alloy and high-strength engineering plastic
- Front Lamp: Included
- Self Retracting Strap: Not included
- 7 inch Pneumatic Wheels: Not supported

Rotation Ranges

- Body Rotation: ±48°
- Thigh Rotation: −200° to +90°
- Shank Rotation: −156° to −48°

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Mobility and Motion Performance

- Top Speed: 2 m/s
- Typical / Max Payload: 8 kg / 12 kg
- Max Step Height: 16 cm
- Max Slope: 40°
- Max Joint Torque: 45 N·m
- Aluminium Knee Joint Motors: 12 set
- Cooling System: Joint heat pipe cooler
- Wiring: Intra-joint circuit

Battery and Power

Battery and Power

- Battery Type: Long Endurance (15000mAh)
- Battery Capacity: 8000 mAh
- Battery Life: 2–4 hours
- Voltage Range: 28V – 33.6V
- Max Working Power: 3000W
- Charger Specs: Fast Charge (33.6V / 9A)
- Overheat / Overcharge / Short Circuit Protection: Yes
- Wireless Charging Pad / Self Charging Board: Yes, compatible

Perception and Sensing

- iDAR: Hesai XT16 3D LiDAR
- Front Camera Resolution: HD (1280 × 720)
- Front Camera Lens: Ultra wide-angle (120° FOV)
- Foot-End Force Sensor: Included
- Wireless Vector Positioning Tracking Module: Included

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Battery and Power

Interfaces

- USB 3.0
- HDMI
- Ethernet
- External Power Input: 24V / 12V / 5V
- Power Connector

Compatible Expansion Options

- Servo Arm: Compatible
- Depth Camera (D435i): Compatible
- Hesai XT16 LiDAR: Compatible
- Mid-360 LiDAR: Compatible
- Wireless Charging Pad / Self Charging Board: Compatible

Connectivity and Communication

- Wi-Fi: Wi-Fi 6, dual band
- Bluetooth: Bluetooth 5.2, 4.2, 2.1
- 4G Module: Included
- Manual Remote Control: Included
- Intercom Microphone: Included (via app)
- Built-in Speaker: Included (3W)
- Voice Function: Supported

Software and Development

- Secondary Development: Supported
- Graphical Programme: Supported
- Basic Actions: Supported
- Intelligent detection and avoidance: Supported
- Side-Follow System (ISS 2.0): Supported
- OTA Upgrade System: Supported
- RTT 2.0 Picture Transmission: Supported

Development Resources

- Provides models, motion control SDK and APIs, as well as perception development interfaces with sample code.

Technical Specifications

Specification	QL-Unitree Go2 EDU+
Main CPU	8-core high-performance processor
High Computing Power Module	NVIDIA Jetson Orin NX 16GB, 100 TOPS
Secondary Development Support	Supported
Dimensions (Standing)	70 × 31 × 40 cm
Dimensions (Crouching)	76 × 31 × 20 cm
Weight (with Battery)	15 kg
Voltage Range	28V – 33.6V
Battery Type	Long Endurance (15000mAh)
Materials	Aluminum alloy and high-strength engineering plastic
Battery Capacity	8000 mAh
Battery Life	2–4 hours
Max Working Power	3000W
Charger Specs	Fast Charge (33.6V / 9A)
Protection	Overheat / Overcharge / Short Circuit Protection
Payload (Typical / Max)	8 kg / 12 kg
Battery Life	2–4 hours
Top Speed	2 m/s
Max Step Height	16 cm
Max Joint Torque	45 N·m
Knee Joint Motors	12 set
Cooling System	Joint Heat Pipe Cooler
Wiring	Intra-Joint Circuit
Max Slope	40°
Body Rotation	±48°

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Technical Specifications

Thigh Rotation	−200° to +90°
Shank Rotation	−156° to −48°
LiDAR	Hesai XT16 3D LiDAR
Front Camera	HD (1280 × 720), 120° ultra wide-angle
Wireless VPT Module	Included
Foot-End Force Sensor	Included
Wi-Fi	Wi-Fi 6, dual band
Bluetooth	Bluetooth 5.2, 4.2, 2.1
4G Module	Included
Interfaces	USB 3.0, HDMI, Ethernet, External Power Input (24V / 12V / 5V), Power Connector
Manual Remote Control	Included
Intercom Microphone	Included (via app)
Built-in Speaker	Included (3W)
Voice Function	Supported
Basic Actions	Supported
Graphical Programme	Supported
Side-Follow System (ISS 2.0)	Supported
Intelligent Detection, Avoidance	Supported
OTA Upgrade System	Supported
RTT 2.0 Picture Transmission	Supported

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Connect with QuakeLogic – QL–Unitree Go2 EDU+

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For quadruped robotic platforms, AI development systems, and advanced robotics solutions.

Our Commitment to Advanced Robotics & AI Excellence

Certified Quality Assurance

Compliant with advanced robotics engineering standards, ensuring reliable performance, safe operation, and long-term stability in AI and autonomous system environments.

Advanced Mobility & AI Performance

Delivering dynamic quadruped locomotion, real-time AI processing, and high-precision perception with integrated LiDAR and vision systems for autonomous operation.

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Providing system integration, developer support, SDK guidance, and post-deployment assistance to ensure efficient operation and scalable robotics development.

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Discover how the QL-Unitree Go2 EDU+ Quadruped Robotic Platform enables advanced robotics development, autonomous navigation, and AI experimentation.

Designed for developers, researchers, and innovation-driven industries, the system delivers powerful onboard computing, real-time perception with LiDAR, and seamless integration into modern robotics ecosystems

Learn more about platform capabilities, development tools, and intelligent robotics systems.

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