UniX AI

Panther

Next-Generation Full-Size Wheeled Dual-Arm General-Purpose Humanoid Robot

UniX AI's next-gen humanoid robot Panther features 34 high-DoF joints, the world's first mass-produced 8-DoF bionic arms, and adaptive intelligent grippers. Built on an omnidirectional four-wheel steering and drive chassis, it delivers agile and flexible mobility. An 80 cm upper-body lift enables ground-level reach, while a wider field of view supports smoother navigation and more stable manipulation in complex environments. Powered by an upgraded 48V platform and a new power architecture, Panther offers stronger output, greater mobility, and higher stability—redefining how high-performance embodied robots operate in complex environments.

Full-Size Humanoid

Full-size with a height of 1600-1750mm. Ground-level operation,covering the full height range.

34 DoF High Flexibility

48V high-voltage drive for higher output and more stable high-speed control.
Compatible with dexterous hands, enabling complex tasks in confined and diverse scenarios.

High Computing Capability

Equipped with powerful edge computing (up to 2070 TOPS), ideal for AI perception and real-time control.

2-DoF Head

Yaw ±90°, Pitch +20°/-86°

Minimum Passage Width: 65 cm

Torso

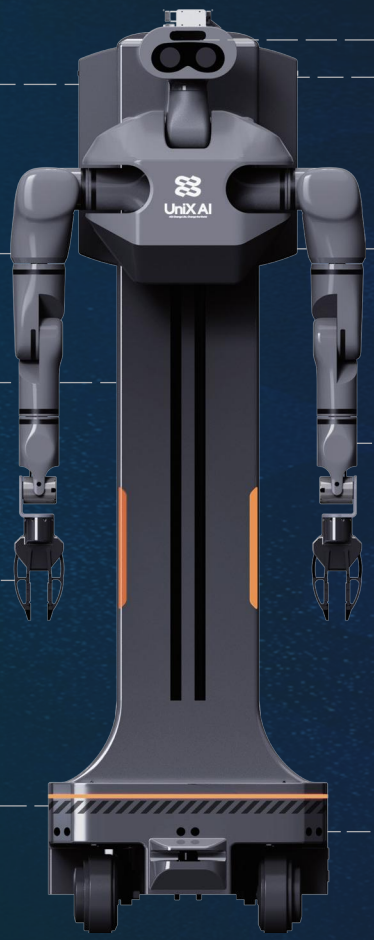
Lifting Height: 600-800 mm

End Effector

Contour Two-Finger Gripper

High-Density Battery

Battery Life: 6 - 12 h



Perception System

Top 3D LiDAR (optional)
Head mounted dual RGB & RGBD Camera

Intelligent Voice Interaction

Dual Speakers
6-Mic Circular Array

8-DoF Bionic Arm

Dual-arm Load Capacity: 12 Kg
Single-arm Reach: 982 mm
Repeatability: ±0.5 mm

Chassis System

Four-Wheel Steering And Four-Wheel Drive Omnidirectional Chassis
Front and Rear 360° LiDAR
Ultrasonic Sensor
Movement Speed: 2m/s

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Panther Series Specification

Model Type		Panther Pro	Panther Pro Max
System	Total DoF	34 DoF	34 DoF
	Dimensions (L * W * H)	450 mm * 450 mm *1600 mm	456 mm * 570 mm *1750 mm
	Min. Passage Width	65 cm	75 cm
Head	Field of View	Yaw ±90°, Pitch +20°/−86°	Yaw ±90°, Pitch +20°/−86°
	Head Cameras	HD Stereo Camera*1; RGB-D Camera*1	HD Stereo Camera*1; RGB-D Camera*1
Bionic Arm	DoF per Arm	8 DoF	8 DoF
	Dual-arm locad Capacity	6 Kg	12 Kg
	Single-arm Reach	982 mm	982 mm
	End Effector	Two-Finger Adaptive Gripper / Five-Finger Dexterous Hand (Optional)	Two-Finger Adaptive Gripper / Five-Finger Dexterous Hand (Optional)
Torso	Lifting Height	600 mm	800 mm
	Indicator Lights	/	2
	Emergency Stop	Physical E-Stop / Wireless E-Stop	Physical E-Stop / Wireless E-Stop
Interaction Model	Voice Interaction	Supports Multiple LLMs (e.g., DeepSeek)	Supports Multiple LLMs (e.g., DeepSeek)
External Interfaces	Reserved Ports	HDMI *1, USB*1, RJ45*1, Debug Port *1, 24V Power Port *2, External Mounting Ports *2	HDMI *1, USB*1, RJ45*1, Debug Port *1, 24V Power Port *2, External Mounting Ports *2
Communication	CAN	CAN2.0	CAN2.0
Compute Platform	Onboard Compute	NVIDIA Jetson Orin NX 16G (100 TOPS)	NVIDIA Jetson AGX Orin 64G (275 TOPS)
Battery	Runtime	8~10 h	8~10 h
	Charging Time	~2.5 h	~2.5 h
	Capacity	48 V / 18 Ah	48 V / 18 Ah
Chassis System	Max. Speed	2 m / s	2 m / s
	Drive Mode	Omnidirectional Four-Wheel Drive (4WD)	Omnidirectional Four-Wheel Drive (4WD)
	Max. Obstacle Clearance	⩽20 mm	⩽20 mm
	Max. Climbing Angle	6°	6°
	Min. Turning Radius	0 mm (Spin-in-Place)	0 mm (Spin-in-Place)
	Navigation Sensors	LiDAR * 1	LiDAR * 2
Teleop System	VR Device	quest3S	quest3S

*UniX AI reserves the right to modify product specifications and retains final interpretation rights