MODEL	Walker Tienkung - Voice & Vision	Walker Tienkung -Voice & Vision + Embodied Intelligence
Picture		
Height	172cm	172cm
Weight	~60kg	~73kg
Total DOF	21	42
Head/Neck DOF	/	3-DOF Head Module (Standard)
Arm DOF	4 (Shoulder*3, Elbow* 1)	7 (Shoulder*3, Elbow* 1, Wrist*3)
Leg DOF	6 (Hip*3, Knee* 1, Ankle*2)	6 (Hip*3, Knee* 1, Ankle*2)
Waist DOF	1	1
Depth Camera	Depth Camera ×2	Depth Camera ×3
High-Precision IMU	√	√
6-Axis Force Sensor	/	6-Axis Force Sensor ×2 (Standard)
AI Voice Kit	Linear MIC*4, Speaker1* , Sound card 1, 720P Monocular Camera*1	Linear MIC*4, Speaker1* , Sound card 1, 720P Monocular Camera*1
Dexterous Hand	/	6-DOF Dexterous Hand ×2 (Standard)
Battery	30Ah + 3Ah	30Ah + 3Ah
Runtime	6h (Standby), 3h (Continuous)	6h (Standby), 3h (Continuous)
Onboard Computer	CPU: Intel Core i7 (4.7GHz max);	CPU: Intel Core i7 (4.7GHz max);
	RAM: 16GB; SSD: 256GB	RAM: 16GB; SSD: 256GB
AI Compute Board	NVIDIA Jetson AGX Orin (275 TOPS)	NVIDIA Jetson AGX Orin ×2 (550 TOPS)
Open-Source Interface	Full motor/sensor control API	Full motor/sensor control API
Internal Communication	CAN/EtherCAT (1000Hz max)	CAN/EtherCAT (1000Hz max)
External Communication	WiFi6, Bluetooth 5.2, Ethernet	WiFi6, Bluetooth 5.2, Ethernet
Middleware	ROS2	ROS2
Cooling	Continuous motion without overheating	Continuous motion without overheating
Warranty	1 Year	1 Year
Basic Features	Full size humanoid configuration: 20 DoF humanoid robot configuration, supporting 10km/h high-speed running and complex movements; Capable of forward, backward, turning, standing still, brisk walking, running, and full body control (arms, bones, legs) with open interfaces	Full size humanoid configuration: 20 DoF humanoid robot configuration, supporting 10km/h high-speed running and complex movements; Capable of forward, backward, turning, standing still, brisk walking, running, and full body control (arms, bones, legs) with open interfaces
Extra Features	- Includes Basic features + voice interaction, vision-based navigation, LLM/VLM integration.	- Includes Voice & Vision Pro features + embodied AI scenarios (hand-eye coordination, dexterous manipulation, VLA integration).