



VIATRIX™

Range Extended Powered Exoskeleton

With years of in-depth research in exoskeleton development, ULS Robotics, leveraging our cumulative R&D expertise and practical application experience, presents to you “VIATRIX”, our first¹ consumer-grade exoskeleton.

Derived from Latin, “VIATRIX” means “traveler”. Whether for daily walks or athletic challenges, VIATRIX empowers you with strong electric assistance and precise control, helping you conserve energy, enhance performance, and allowing you to break through your limits, so as to discover new horizons throughout your movement journey.

Focusing on a wide range of everyday usage scenarios, ULS Robotics has engineered a variety of innovative architectures for VIATRIX, delivering groundbreaking advancements in flexibility, intelligence, and battery endurance.

Multiple Innovations: Giving Rise to a New Exoskeleton Paradigm



FLOAT 360:
Floating Hip Joint Mechanism

Breakthrough Flexibility

The industry-pioneering floating hip joint mechanism, coupled with the leg motor design, enables smooth execution of wide-range movements such as splits and deep squats.



Proprietary Automotive-Grade Servo Motor

Millisecond-Level Precise Response

Automotive-grade motor chips ensure exceptional stability, while the integrated servo motor and gear system precisely deliver formidable power with high efficiency.



Large-capacity Battery Ensures Reliable Support

25km Long-Range Endurance

Each battery supports up to 25 km of operation. The quick-release and replacement design effectively eliminates concerns regarding range anxiety and charging inconvenience.



Hiking & Trekking

AI-adaptive mode provides assistance during uphill climbs, while impedance mode offers cushioning on descents.



Cycling

VIATRIX autonomously learns the pedaling cadence and amplitude to deliver tailored dynamic assistance.



Walking & Running

VIATRIX supports running at speeds of up to 16 km/h and accommodates slow-paced stair climbing.



Fitness Training

VIATRIX provides reverse torque for resistance training, with leg straps offering both compression and protection.

Providing Robust Assistance for Diverse Daily Activities

50%

Enhancement in Leg Strength

30~40%

Reduction in Energy Expenditure³

25km

Extended Range⁶

AI

Intelligent Gait Recognition

Specifications

Weight⁴

3.0 kg (Does not include batteries and fabrics)

Size

400*400*270 mm (Folded)

Max. Torque

46 Nm (Total of Two Legs)

Operation Modes⁵

AI-Adaptive Mode (Supports Hiking, Walking, Running) ,
Resistance Mode (Supports Downhill, Fitness Training), Cycling Mode

Power Supply

Replacable Lithium Battery

Operating Temperature

-20°C ~ 65°C

Battery Range⁶

Up to 25 km

Power Your Move.

¹ "First" refers to the inaugural consumer-grade powered exoskeleton developed by ULS Robotics.

² "Industry - pioneering" implies that as of the product launch on July 26, 2025, no publicly available consumer-grade exoskeleton robot products had adopted similar principles or mechanisms.

³ Determined through oxygen consumption comparison experiments; the relevant data is sourced from the test results of ULS Robotics' laboratory.

⁴ The weight of the device may vary depending on configurations and accessories. Please refer to the latest official announcements from ULS Robotics and the actual product received.

⁵ The activity scenarios listed in this product manual reflect those supported as of the product launch on July 26, 2025. Please refer to the latest official announcements from ULS Robotics.

⁶ The battery endurance in kilometers represents the maximum distance achieved with a single battery operating at 50% power and walking speed of 6 km/h; test data provided by ULS Robotics' laboratory.



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