

IRMO M1: The AI-Powered Smart Leg Exoskeleton for Improved Mobility and Less Fatigue

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EINPresswire.com/ -- IRMO, a leader in robotics and wearable technology, has launched its lightweight, AI-powered leg exoskeleton on [Kickstarter](#). The device is designed to enhance human mobility and reduce muscle fatigue, empowering users to achieve sustained performance over extended durations.

“Engineered to interact seamlessly with the body, the IRMO Exoskeleton provides dynamic assistance for human movement.,” said the spokesperson of IRMO. “Its AI-driven system analyzes user movement patterns to offer personalized assistance, improving motion efficiency and reducing knee stress.”

The exoskeleton delivers up to 45% assistance for leg movement, helping to alleviate fatigue during long-time or intensive activities. It integrates IRMO’s proprietary HMoCS Motion Assist Sys, an AI system that has been trained using over 1,000 user datasets and 2,000 hours of motion experiments. The system employs sensors, cameras, and laser rangefinders to interpret users’ motion intentions with over 95% accuracy, adjusting support in real time for activities such



Equipped with IRMO’s proprietary HMoCS Motion Assist Sys, the exoskeleton can deliver up to 45% assistance for leg movement, significantly alleviating user fatigue during intensive activities.



Built from lightweight carbon fiber, the IRMO Exoskeleton weighs just 2.2 lbs per leg. The device features an IP67 waterproof rating, ensuring durability for a wide range of users, from commuters to adventurers.

as walking, running, climbing, or cycling.

M1 also features a kinetic energy recovery system that converts kinetic motion into electrical energy, with a conversion rate of up to 50%. Additionally, it uses Flexmo Dynamically-Balanced Joint Technology, which mimics human muscle elasticity, reducing knee impact by up to 60% during intense activities. Via the IRMO app, users can monitor performance data, switch between modes, and adjust assistance levels to suit their needs.



Flexmo Joint Technology cuts knee impact by up to 60%; a 50% kinetic energy recovery rate extends operational battery life.

The device is built to assist a wide range of users, from daily commuters to those engaging in more physically demanding activities. Weighing around 2.2 lbs per leg and made from lightweight carbon fiber, it is both durable and reliable. Featuring an IP67 waterproof rating, its robust construction stands up to tough environments.

About IRMO

The IRMO M1, an intelligent wearable exoskeleton robot, is developed by Hangmo Robot Co., Ltd. The company focuses on developing robotics and wearable technology with an emphasis on AI-powered exoskeletons. The company combines cutting-edge sensor fusion, ergonomic design, and adaptive artificial intelligence to make products that empower human motion, helping users improve their strength, endurance, and overall mobility.

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