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Leading technology creates a better life for mankind.

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优龙机器人
EULON ROBOT

EULON

Advanced Flex, Technology Enhances Walkability



Strong technical support from the Shenzhen Institute of Advanced
Technology Chinese Academy of Sciences.

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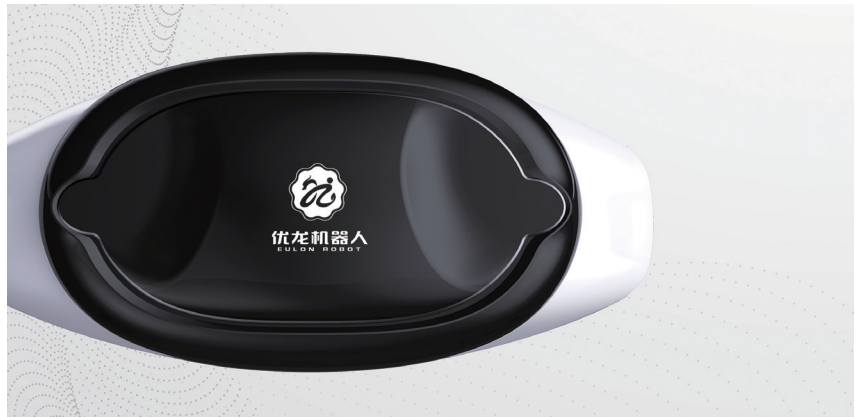
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ABOUT US

"Youlong Robot"(EULON) is a company dedicated to developing of advanced rehabilitation technologies. The company integrates independent R&D, large-scale production, and market sales of exoskeleton robots. The company always adheres to the principle of putting people oriented, serving patients, and putting users first. The company devotes to bringing a better life to humanity through leading technology.



Corporate Vision

I aspire to be a shining star
illuminating the dark night sky.

Corporate Mission

Creating a Better Life for Humanity with Leading
Technologies.

Joint laboratory

Strong technical support from the shenzhen Institute of Advanced Technology,Chinese Academy of Sciences.



中国科学院深圳先进技术研究院
SHENZHEN INSTITUTE OF ADVANCED TECHNOLOGY
CHINESE ACADEMY OF SCIENCES



Lower Limb Exoskeleton Gait Training System

Product Introduction

The Lower Limb Exoskeleton Gait Training System is primarily designed for the rehabilitation of patients with lower limb mobility disorders. It aids in the functional recovery of the lower extremities, enhances blood circulation, alleviates muscle spasms, and boosts neural excitability. This system is proven to effectively mitigate complications and sequelae resulting from spinal cord injuries. It also helps health-care professionals implement repetitive rehabilitation exercises for patients, reducing the workload healthcare professionals and shortening the rehabilitation cycles for patients.

Applicable people

Individuals with hemiplegia: Patients with cerebrovascular disease or other motor disorders of the lower limbs caused by brain damage;

Individual with paralysis: Patients with severe or complete motor function loss in the lower limbs or below the trunk;

Individual with Other Movement Disorders: Patients with impaired motor function due to muscle atrophy, lower limb weakness or other causes.

Adaptation Scenarios

This product is ideally suited for use in medical institutions, rehabilitation centers, and other professional healthcare settings.

The product can be paired with the Eulon Assisted walking Bracket to facilitate rehabilitation training. The product adopts mechanical fixation and strap protection to ensure user safety and security.

Getting out of the wheelchair and back to normal life



Early involvement

Quick to put on and Easy to use, leading to a faster and easier entry into rehabilitation.



Gait control

Adjusting gait and stride length by personalizing, multiple training modes to select.



Versatile Application

Applicable to medical facilities, rehabilitation centers, and home settings.



Bionic design

Designed for Ergonomics, compliant with natural human motion.



Natural Standard Gait Training for Overall Walking Improvement

Functional Features

- Innovative Drive System.
- Advanced dynamic control strategy.
- Self-developed integrated motion joints.
- Sitting position wear, convenient adjustment.
- Intelligent recognition of user movement intent.
- A variety of built-in rehabilitation training modes.



Product Advantages

- 1 Multi-training mode.
- 2 Unique process control.
- 3 Precise motion control.
- 4 Simulated natural gait.
- 5 Intelligent sit-up feature.



Soft Exosuit

Product Introduction

The EULON exosuit, equipped with Bowden wire drive, is designed to assist wearers in various movements, such as walking and uphill climbing. It is particularly beneficial for individuals with weakened lower limbs. The exosuit integrates advanced technologies, including bionics and in-depth human-machine interaction. Moreover, it improves the comfort of human wearing by iterative learning and prediction technology.

Applicable people

People undergoing lower limb gait training during the rehabilitation period, such as those with hemiplegia and peripheral or central nervous system disorders; individuals with insufficient lower limb strength, such as the elderly or those with chronic diseases, in daily life.



Purpose of Rehabilitation



Joint ROM Training

Increasing the range of motion of user's joints by active and passive mobility training



Aerobic Training

Promoting blood circulation and increasing faster recovery of muscle function by Enhancing cardiorespiratory endurance



Coordinated Training

Enhancing trunk balance control ability in the middle and late stages of rehabilitation



Muscle Strength Training

Enhancing muscle strength by different types of assistance simulating various scenarios in life



Endurance Training

Increasing muscular endurance and muscle recovery by indirect and continuous training



Functional Training

Enhancing your walking ability by wearing it close to your body on a daily



Enhance proprioception by stimulating motor potential



Bionic Design

Researching based on muscle characteristics, and analyzing human motion by AnyBody software



Adaptive Motion Control

Tracking wearer's gait by Adaptive algorithm, and achieving transfer of control strategies between different environments



Intelligent Controls

Controlling by applet real-time, and giving a feedback on visual gait data



Gait Regulation

Adjusting gait and stride length by personalizing, and providing multiple modes for walking training

Areas of application



Mountaineering



Walking trips



Morning Exercises



Hiking trip



Rehabilitation training



Body enhancement



Ankle-joint based walking assistive training device

—Ruyi

Product Introduction

EULON "Ruyi" Ankle-joint based walking assistive training device is an active intelligent rehabilitation robot. Ruyi employs a gait recognition algorithm to determine the time for ankle dorsiflexion in wearable walking, thereby providing dorsiflexion assistance for the ankle. Intelligent control system ensures that the device can be used without any learning after startup; visual data interface provides detailed gait rehabilitation data; personalized assistive strategies can meet the different training needs of users.

Core Technology

Precision control

Equipped with multi-type sensors to accurately recognize movement gait in real time. By means of Multi-data fusion to analyze ankle dorsiflexion timing, thus providing assistance.

Personalized adjustment

Adjustable dorsiflexion assistance and assistive timing according to the wearer's actual condition.

Gait analysis

Comparison of gait curves before and after to provide a basis gait analysis for patient.

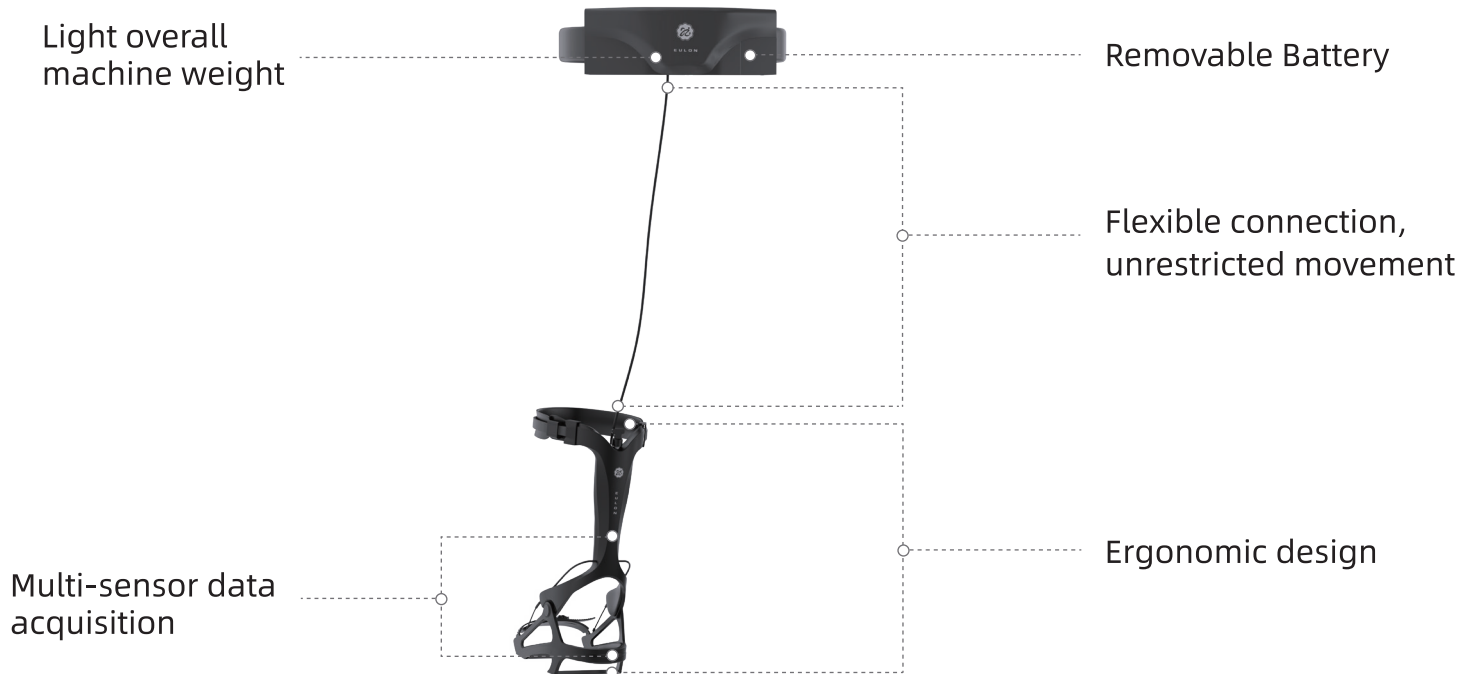
Performance Parameters

Product weight	2 kilos (approx.)
Maximum Dorsiflexion Range of Action	$25 \pm 2.5^\circ$
Maximum plantarflexion range of motion	$35 \pm 2.5^\circ$
Output strength	200N
Battery capacity	3350mAh





Compliant force control, Targeted rehabilitation training



Multiple security protections to guard every aspect of your training



Real-time feedback for monitoring information



Precise stride length, stride frequency and angle acquisition



Parameter settings to efficiently configure the device



Security protection, error alert function



Applicable population: People with ankle dyskinesia, including foot drop, pronation, etc.



Lower limb walking assistive training device - Firefly

Product Introduction

EULON "Firefly" is a lower limb walking aid rehabilitation robot providing toe flexion assistance. "Firefly" weighs approximate 3kg making easy to wear. "Firefly" can be worn within 1 minute under the user is familiar with the operation. The product enables active assistance through accurate gait recognition, Provides real-time assistance in conjunction with the body's movement patterns. The patient can perform rehabilitation gait training without any learning after wearing it.

Core Technology

Precise control

Equipped with a variety of different sensors to monitor motion gait in real time. Accurately recognises movement intent by fusing and calculating gait parameters such as stride length, stride speed, stride length, joint angle.

Best help

Optimization of the control strategy through ergonomics analysis for optimal power assistance. Proactive matching of human movement characteristics, relying on key real-time parameters. Ensuring the effectiveness and continuity of assistance.

Gait analysis

Realizing the comparison between the original and the post-assisted gait, to make the adjustment parameters getting real-time feedback. Providing an analytical basis for evaluating the rehabilitation effectiveness for patient.

Performance Parameters

Product weight	3 kilos (approx.)
Battery capacity	6700mAh
Fastest walking speed	120 steps/minute

Applicable population: Patients with ankle hypodynamia or gait abnormalities due to hemiplegia





Ergonomic design for comfort and peace of mind



Data logged for the entire workout



Real-time feedback
for monitoring information



Multi sensor data acquisition for
accurately identifying motion intentions



Parameter settings to
efficiently configure the device



Security protection, error alert function



Ankle rehabilitation trainer

Product Introduction

EULON ankle rehabilitation trainer is designed according to the normal ankle-joint structure and motion pattern, which can be adapted to different patients. Exercise the muscles of the lower limbs and restore motor control of the ankle joint by walking. It can correct the deformity to some extent, inhibiting spasticity and maintaining normal walking; also preserves some ankle range of motion, promoting coordinated development of lower limb muscles and improving gait.

Core Technology

Comfortable and lightweight

Magnetic closure design, easy to put on and take off

Bionic foot and ankle construction

Ergonomic design with flexible ankle movement

High-quality PA material

Light and stable, high mechanical strength, good wear-resistant toughness

Provides ankle freedom

Adjustable dorsiflexion angle, adjustable assistive torque

Assisting Exercises using Scientific methods

Increasing stability while accurately correcting walking





Easy to wear

Elasticated Velcro,
free adjustable length

Easily to adjust
dorsiflexion strength

Magnetic clasp design

Outer wear design
for convenience



Performance Parameters

Ankle joint activity angle

Dorsiflexion 25° Plantarflexion 35°

Tolerance为 $\pm 2.5^{\circ}$

Exercise mode

Walking mode providing ankle freedom

Foot size

Suitable for shoes in 34~45 yards

Weight range

40kg~95kg

Torque adjustment

Autonomous regulation

Product weight

Approximate 500g





Limb Joint Assistance Exoskeleton – Youlong

Product Introduction

The Youlong bilateral hip-lifting assistance exoskeleton is an intelligent wearable device designed to compensate for and enhance lower limb motor function. It is specifically designed to improve the wearer's efficiency in daily activities such as walking, climbing stairs, outdoor sports, and hiking. Through an advanced power system and precise sensor modules, the device can instantly perceive the user's walking intention, providing efficient and adjustable assistance output. This helps reduce the burden on the lower limbs during walking, improving gait stability and exercise comfort. It truly integrates technology into life, assisting every step forward.

Target Users

Physical Fitness Assistance: For patients with limited activity due to cardiopulmonary insufficiency, injury, etc., to enhance their self-care ability and activity range.

Sports Enthusiasts: Provides intelligent assistance to help improve performance and break through limits.

Patients with Insufficient Muscle Strength: Provides daily activity support for people with decreased lower limb muscle strength and endurance due to aging, injury, etc.

Post-Rehabilitation Consolidation: Provides confidence support for users in the later stages of rehabilitation, encouraging more community walking activities.

Performance Parameters

Product Weight	Approx. 2.2 kg
Battery Life	Approx. 2~4 hours
Max Power	Up to 16 Nm
Gear Adjustment	6-levels
Waterproof Ratin	IP54
Operating Temp	-10-45°C





Full-Scope Intelligent Mobility Assistance

Unleashing infinite possibilities for walking



Adjustable Structure

Comfortable fit for various body types, Wearable in 30 seconds — perfect for frequent daily use



High-Efficiency Power Output

Precision-calibrated drive unit delivers steady, natural motion experience



Intention Detection System

Multi-modal sensors + smart algorithm — interpret motion intentions from complex body dynamics



Safety Monitoring Functions

Includes posture warning and auto start/stop when sitting or standing
Ensures reliable operation and user safety

Structural Modules





Ankle Joint Walking Assistance Training Device - Ruyi 2.0

Product Introduction

The Ruyi 2.0 is specifically designed for individuals with ankle joint mobility impairments, providing dorsiflexion assistance and gait correction training. Equipped with Bowden cable-driven force to mimic muscular contraction, the device facilitates plantar flexion movement of the ankle joint, simulating the natural Achilles tendon contraction during walking. Its lightweight structure and bionic design streamline the wearing process while ensuring foot and ankle stability.

Core Technologies

Smart Gait Analysis

The core algorithm of the Ruyi 2.0 accurately identifies walking intent and determines gait cycles and phases. This enables dorsiflexion assistance to activate precisely at the initiation of the swing phase and conclude before heel strike, seamlessly aligning with natural physiological gait patterns.

Bionic Achilles Tendon Design

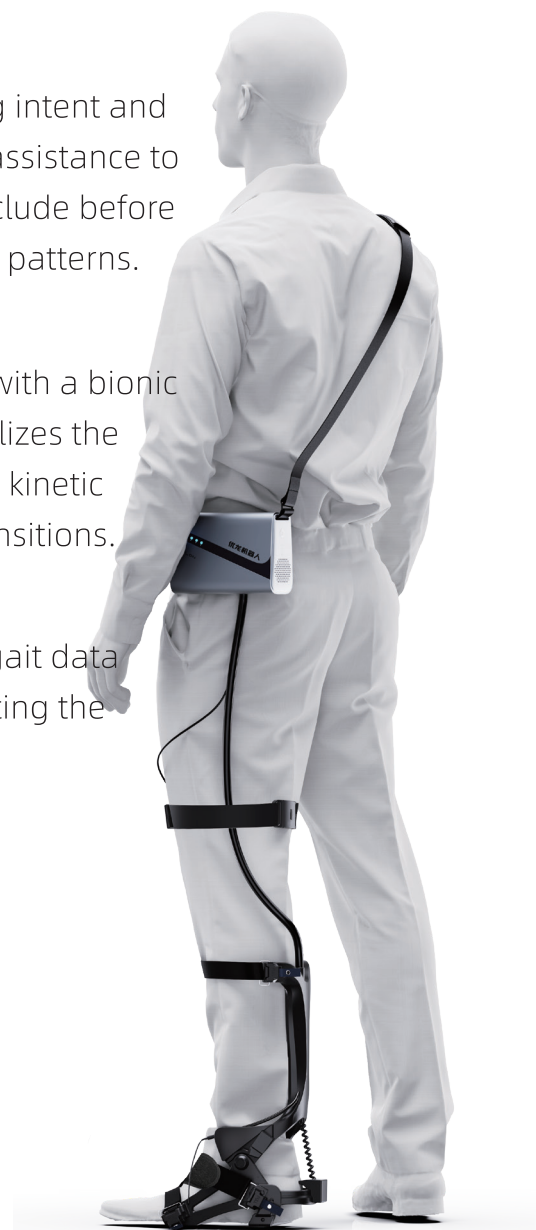
The stable ankle brace integrates a dorsiflexion-assist spring with a bionic Achilles tendon design. This structure not only effectively stabilizes the ankle joint to prevent inversion and eversion but also provides kinetic assistance during the gait cycle, resulting in smoother gait transitions.

Controllable via WeChat Mini Program

Simple and easy to use, with all device control and real-time gait data accessible directly through the WeChat mini program, eliminating the need for a separate app.

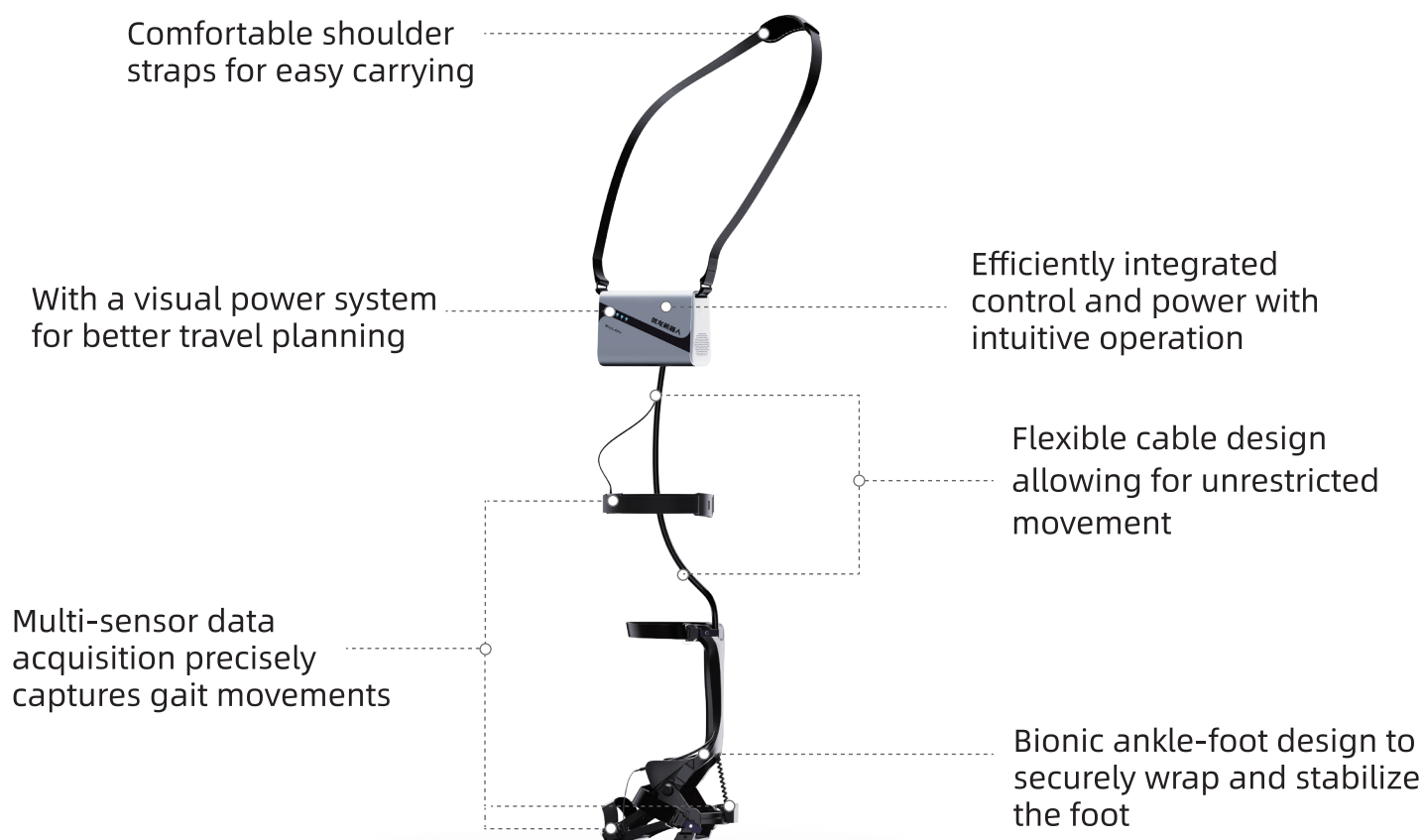
Performance Parameters

Product weight	approximately 1.8 Kg
Battery life	≥6 hours
Fastest walking speed	120 steps/minute
Maximum toe flexion angle	≥ 235° (tolerance ≤ 2.5°)
Maximum dorsal flexion angle	≥ 30° (tolerance ≤ 2.5°)





Structural module



Target Audience

Post-Stroke Foot Drop Rehabilitation

It provides lifting assistance to prevent foot dragging, enabling steadier and smoother strides.

Muscle Reconditioning After Ankle Surgery

Build muscle strength and regain daily independence, empowering you to move your ankle with greater flexibility

Daily Training for Hemiplegic Patients

Provides strong support for the affected side, enabling more coordinated steps and easier independent walking

Gait Correction for Patients with Neurological Injuries

Walk longer distances with less fatigue and a more natural gait



EULON

Technology Enabled Walking

