

# REVOLUTION IN THE MEDICAL FIELD

## DESTINATION OF USE:



## METHODS OF USE:



U&O is an innovative MedTech startup company that designs and develops biomedical exoskeletons.

Our mission is to design, create and promote innovative exoskeletons and make them efficient, accessible solutions to improve gait mobility and change the quality of life of people with lower limb disabilities.

Founded with pride in 2016 by a highly qualified Italian team of mechatronic designers, computer engineers, and physiotherapists.

Driven by a strong passion and interest in robotic devices, we want to transform our ideas and passion into innovative products to help users with severe neurological and neurodegenerative diseases by restoring mobility and allowing patients to walk again.

All U&O devices are engineered, designed, and manufactured in Italy.

Make a step forward.  
Regain mobility freedom.

## Awards:



**UAN GO**  
innovative exoskeleton

[www.uando.it](http://www.uando.it)  
MADE IN ITALY



**25 Kg**  
WEIGHT

UAN.GO has a lightweight alloy frame, with technopolymer components. The weight is distributed to the ground with no burden on the patient. Integrated frame battery for a fast change with second unit.

**BATTERY PACK**

Integrated frame fast charge battery.

**TOUCH SCREEN DISPLAY**

**EASY & FAST SETUP**

- POWER SET
- MOTION MAPS
- SPEED
- DATABASE SESSIONS
- USER SET UP
- EXOSKELETON SET UP
- REPORT SESSIONS

**ITALIAN MEDICAL TECHNOLOGY**

UAN.GO is an **innovative exoskeleton** designed by U&O, **italian startup** specialized in designing and manufacturing **medical robotic exoskeletons**, rehabilitation devices for people with lower limb disability and mobility disorders.

Our devices **improve** the rehabilitation process of the mobility functions enabling doctors and physiotherapists to address therapy according to patients' needs.

The UAN.GO exoskeleton has been designed and created to achieve **more freedom** of movement in patients with disabilities, assuring the efficacy of therapy together with **easy use** and application. This device has a touchscreen interface for an **easy setup** and **intuitive control**; through the monitor, the user can easily set a **personalized** gait rehabilitation path; UAN.GO is equipped with **innovative sensors** for automatic movement control.

Thanks to innovative sensors, innovative software and the **HU.Connect** system it is possible to record movements, therapy and analyze all the data connected to the training path and generate **clinical reports**.

With the UAN.GO innovative exoskeleton maximum results can be obtained in the rehabilitation path through repetition of functional and **personalized movements**. Thanks to the recording of data and continuous monitoring of robotic therapy, an **optimum neuromotor recovery** and freedom of movement can be obtained.

The device has been developed, taking into account the real **needs of users**, which explains the minimal **ergonomic design** besides an easy, **efficient and safe** use.



**PERSONALIZED TRAINING PATH:**

**HOW IT WORKS**

The innovative UAN.GO exoskeleton sets new standards in rehabilitation technology in terms of great versatility and usability. It can be adapted to patients with different levels of functional walking ability; the therapy can be adapted to the specific needs of each individual patient.

Thanks to an intuitive and easy to use software, a personalized walking rehabilitation path can be created; data can be reviewed quickly and changes made to remarks made.

**UP & DOWN**

Motion map that allows the user to stand up and sit down.

**WARM UP**

Motion map that allows the user to walk on the spot. This sequence is used at the initial stage of path training to relearn the movement of load transfer from one limb to the other one.

**STEP**

Motion map that allows the user to take one step at a time to regain confidence with spaces and improve the coordination between the upper limb and the opposite lower limb.

**WALK**

By selecting this operating mode, the exoskeleton allows the patient to reach a tangible, progressive, functional and intensive training and, ultimately, acquires the necessary skills to be able to walk again.

**STAIRS**

Advanced motion map that allows the user to climb and descend stairs and ramps.

**Motion modes:**

**SPEED:**

Within all motion maps, we can adjust the movement speed to 3 speed levels:

- 01 SLOW
- 02 NORMAL
- 03 FAST

**MAP:**

Every motion map can be adjusted to 3 difficulty levels.

- 01 EASY
- 02 NORMAL
- 03 ADVANCED

**Operating modes:**

**ASSISTED:**

The device is supported by an operator who selects the most appropriate movement compatible with the rehabilitation path.

**AUTONOMOUS:**

UAN.GO is guided by the user who can independently activate the start of the gait and other operating modes (such as up & down, stop and walk) through specific movements of the body which allow the user to command and guide the exoskeleton independently.

**Motion support:**

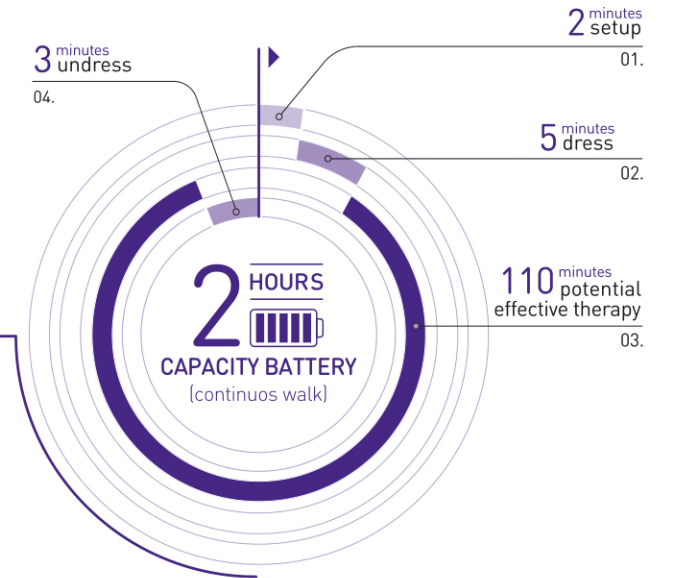
**PASSIVE:**

The movement of the patients is fully assisted by UAN.GO.

**ACTIVE:**

HU.GO partially assists the movement of the patients, to enhance the residual motion ability.

**EXAMPLE OF THERAPY SESSION**



**Patients:**

- Robotic intensive care.
- Enhancing recovery.
- Motivational drive.

**Hospital:**

- High patient turnover
- Marketing effect due to high-tech equipment.
- Possibility to increase the patients target.

**UAN.GO BENEFITS**

**Medical Staff:**

- Quantify therapy data.
- Intensive concentration available drive to easy operation.
- Work with less physical effort.

PELVIS WIDTH SETUP

HINGE FOR FAST DRESSING

HIP POWERED JOINT

FEMORAL LENGTH SETUP

KNEE POWERED JOINT

TIBIAL LENGTH SETUP

ANKLE PASSIVE JOINT

PLANTAR SUPPORT



**HU.Connect** is a simple and functional communication interface, a working application that allows the user to consult and manage the usage data of the UAN.GO device.