



# ArmMotus™ EMU



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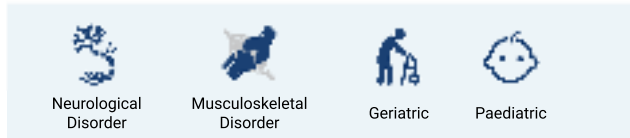
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## Covers the Whole Continuum of Rehabilitation

ArmMotus™ EMU is indicated for the upper limb disability caused by neurological disorder or musculoskeletal disorder. The force feedback technology enables the device to simulate the therapist' hands. It supports the user to adjust the assistance or resistance according to different rehab needs.



Passive Mode  
(0 MMT Score)  
Improve ROM



Assistive Mode  
(1-2 MMT Score)  
Induce active participation



Active Mode  
(3 MMT Score)  
Optimise motor control



Resistance Mode  
(4-5 MMT Score)  
Improve muscle power

## Quantifiable Training

ArmMotus™ EMU is indicated for the upper limb disability caused by neurological disorder or musculoskeletal disorder. The force feedback technology enables the device to simulate the therapist's hands. It supports the user to adjust the assistance or resistance according to different rehab needs.



ROM Assessment



Training Trajectory Analysis



## ArmMotus™ EMU 3D Upper Limb Rehabilitation Equipment

ArmMotus™ EMU is a 3D back-drivable upper limb rehabilitation equipment that adopted an innovative cable-driven mechanism, combined with a parallel structure made of lightweight carbon fibre rods which perfectly reduces the friction and inertia of the device. This enables the control system to respond and execute more efficiently, resulting in higher compliance in human-machine interaction. Fourier Intelligence's self-developed, industry-leading force feedback technology can simulate the soft touch of a therapist. The adjustable assistance or resistance can perform motor coordination, task-oriented and strength training in a 3D space. This brings a new experience to rehabilitation assessment and training.



## Compliant Motion Control Support All Training Modes

ArmMotus™ EMU supports easy training setup in sitting and standing position as well as accommodating different training arms. It integrates different scenarios in the game so that users can train on strength, motor control and joint ROM in one training, making the whole rehabilitation process more efficient.



Gravity Compensation



Combining Actual Object



Bilateral Training



### Strength Training

Adjustable resistance challenges the user to improve their strength.



### Cognitive Training

Improve user's cognition with perception, attention, memory training



### ROM Training

Improve the ROM of shoulder and elbow joints.



### Motor Control

Improve motor control ability through goal-oriented training.



### ROM Training

Simulate activities of daily living.



### Cognitive Training

Coordinative movement and bilateral training.

The force feedback technology can simulate different force environment that can be integrated into the training making them more interesting, immersive and motivating. The real-time visual, audio, and haptic feedback can diversify the training and provides intuitive guidance to the users.



Motor Control



ADL Training



Reaction Training



ROM Training



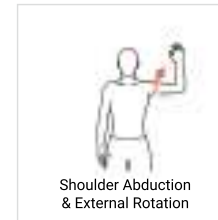
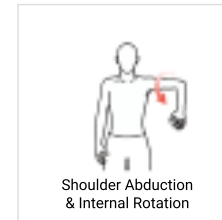
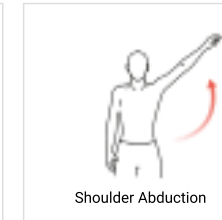
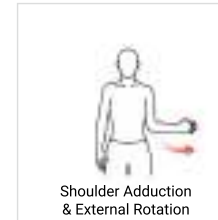
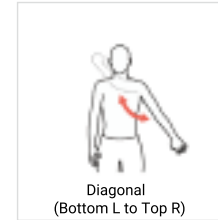
Strength Training



Bilateral Training

## Personalised Training Trajectory

ArmMotus™ EMU can provides comprehensive upper limb training trajectory. The therapist can select and customize different movement according to the user's need.





## Empowering You

Fourier Rehab is a technology-driven company, infusing creativity into the development of exoskeleton and rehabilitation robotics. Together with researchers, therapists and patients, we aim to excel in developing and redefining rehabilitation robotics solutions with interconnectable intelligent robotics technology by elevating user experience with an intuitive, easy-to-use system to enhance the lives of both patients and therapists.

### Fourier Global Research Joint Laboratories and Clinical Partners

