

ZEUS

The Power In Your Hand



Zeus the bionic hand

Zeus is a multi-action, multi-articulated bionic limb combining ease of control with an elegant, robust design. The fingers and thumb provide a firm grasp to perform everyday tasks with ease. The fingers stall individually, allowing them to conform to the shape of the object, regardless of shape and size. Users can choose from 12 grips with an added option of 2 custom grips.

The hand comes with manual wrist rotator but it is compatible with most industry standard electrodes and batteries, as well as elbows.

- **Zeus is the strongest bionic hand on the market (34.17lbf / 152N grip force)**
- **Zeus is impact resistant as it has a skeleton of high strength aluminum, steel and carbon fiber alloy**
- **Even in the event of damage, digits can be repaired very quickly locally; all repairs can be made in less than 60 minutes!**

Zeus is compatible with various industry standard wrists and elbows. Like passive or mechanical elbow/body powered elbow and a variety of electronic and Hybrid elbows as well. It also comes with multiple wrist options including but not limited to friction wrist and electronic quick disconnect wrist.

Zeus is also available in multiple sizes. Zeus can also be provided with silicone gloves in appropriate skin shade that also allow for touchscreen compatibility.



Key Features



Zeus is also compatible for operating various touchscreens

Zeus is CE certified and FDA registered Class 1 medical device

Opposed Grips

Power Grip

In this grip, the thumb is opposed, while all of the other four fingers close until they meet the object or receive a closing signal. The strong grip provides 152N of force spread over all four fingers and thumb. This multi-purpose grip allows you to open a door or shake hands. Individual finger stalling means the grip conforms to the shape of the object so that you can lift things such as a wine glass. Thanks to advanced sensors, the hand optimizes the force applied to the object.



Trigger Grip

This grip is useful for operating appliances which require trigger mechanisms like sprays. The hand grasps the object and conforms to the shape of the object. The index finger and middle finger are controlled proportionately to operate the trigger mechanism. The speed and force applied by the index finger can be modulated on the basis of EMG signal.

Precision Open Grip

In this grip, the thumb moves to a mid-point and stops. The index finger can be controlled proportionally to form a pinch. Middle, ring and little fingers remain open. This grip can be used for picking up small delicate objects and various delicate activities.



Precision Closed Grip

In this grip, the thumb moves to a mid-point and stops. The index finger can be controlled proportionally to form a pinch. Middle, ring and little fingers close fully. This grip can be used for picking up small objects from a table.



Tripod Closed Grip

The Tripod Closed Grip allows you to hold medium sized objects and to carry out activities . The thumb assumes a mid-point position while the index and middle finger move proportionally to reach the tip of the thumb. The ring finger and little finger close fully.



Tripod Open Grip

This grip allows you to hold a variety of daily life objects like a pen, car keys and eggs. The thumb assumes a mid-point position while the index and middle finger move proportionally to reach the tip of the thumb. The ring finger and little finger remain open.





Non-Opposed Grips

Finger Point

The index finger is active and in a pointing position with the rest of the fingers closed. This can be used for pushing switches and buttons.



Active Index

The index finger is active and in a pointing position with the rest of the fingers open. This can be used for working on computer keyboard, typing.



Open Palm

The hand opens to the extent where it provides a slight curvature to support plates, bowls and books. The rubberized palm provides a flat, non-slippery surface to confidently hold objects in this grip.



Hook Grip

This grip is used for lifting up heavy objects like briefcases, shopping bags and gym equipment. Because of the self-locking nature of Zeus, the fingers have a static grip capacity of 35kgs, allowing you to lift heavy objects with ease. This grip can also be used to provide support when getting up from a seated position.



Key Grip

This is a commonly used grip for picking up thin flat objects, holding a key or turning a page. The four fingers assume a position to provide a flat platform for the thumb. The thumb can be controlled proportionately to open and close.



Mouse Grip

This grip is used to operate a computer mouse. The hand assumes the position of the mouse. The index finger and the middle finger can be controlled to push left and right buttons respectively.





Technical Specification

560g / 1.2lbs



Device weight QWD*

1.2sec



Max. closing time

34.17lbf / 152N



Grip force



Medium hand shown in the picture

Height (finger tip to wrist base)	182.7mm / 7.19in
Palm Width	80.6mm / 3.17in
Thickness	29.9mm / 1.17in

Maximum force on knuckles - 90kgs

112.40lbf
500N/50kgs

Force on chassis (static, supporting the hand)



78.68lbf
350N/35kgs

Force with closed hand (static, carrying a bag)

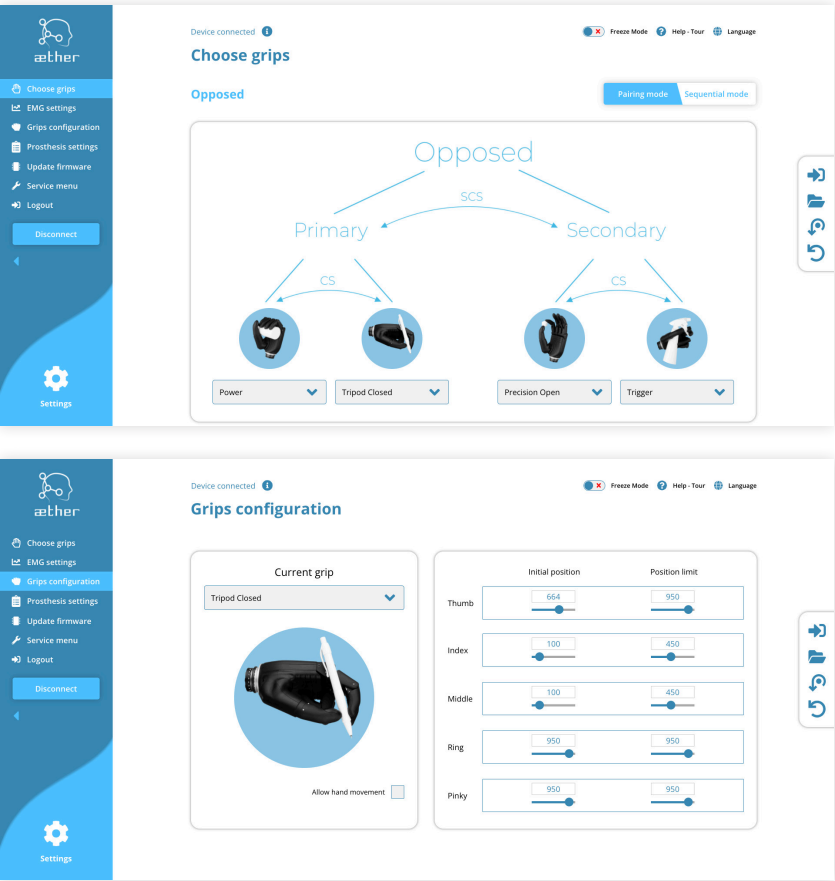
*Depends on the hand size and wrist selection

Software(Web-App)

All the settings of the prosthesis can be adjusted by the clinician, using our dedicated configuration software, via Internet enabled Desktop, laptop or mobile device.

Patient's also receive a mobile application that connects with the hand using Bluetooth.

Zeus can be controlled using muscle signals as well as the mobile application. The hand's firmware can be updated via the software, so that the hand always has the latest features.



Warranty and Compatibility

Compatibility

- The hand is compatible with most industry standard sensor system:
 1. Dual channel EMG
 2. Single channel EMG
 3. Switch
- The hand is also compatible with 7.4V Chargeable Lithium battery systems (either inbuilt or replaceable).



Warranty

The Zeus hand comes with a 2-year-standard warranty from Aether Biomedical Sp. z o.o. which is extendable up to 5 years. The Zeus hand must be serviced every 6 months.. The warranty covers accidental damage as stated in the IFU and User Manual.

Aether Biomedical

Aether Biomedical is a medical robotics company focused on biosignal processing and bionic limbs for upper limb amputees. Since the company's founding, our team has expanded to represent diverse specialties such as engineering, medicine, design and strategy. We are striving to shake up the world of medical technology innovation. Our products are engineered with precision, designed to exceed global standards and are fundamentally driven by human need. Our solutions are conceived and developed in-house and scaled externally with the help of manufacturers and distributors.



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