

Innovating Human Movement. Inspiring Discovery.



30

YEARS of Innovation

12K+

RESEARCH & CLINICAL Customers

96

SUPPORTED Countries

DELSYS C

### **EMG**

# Discover how the brain coordinates movement.

Electromyography (EMG) is a technique used to measure the electrical activity generated by muscles during contractions.

By using EMG technologies, you can gain insights into muscle activation patterns, timing, intensity, and coordination for applications in sports performance, rehabilitation, biomechanics, robotics, and ergonomics.

# **Benefits**

Delsys EMG allows for data to be captured in real-world settings to replicate natural human movement.

- Wireless
- ✓ Incorporated IMU
- ✓ Non-invasive
- ✓ High Fidelity data
- ✓ Dry electrode

## **OUR MISSION**

# **Solving Complex Problems with Advanced Sensing Technologies**

Over the last 30 years, Delsys has been dedicated to innovation and advancing wearable technologies for human movement sciences.

The broad range of EMG sensors that the Trigno platform supports empower researchers to:

- Unleash the potential of human-machine interactions in Engineering
- Discover the complexities of motor control in Neurophysiology
- Reveal the mechanics behind performance in Movement Sciences

Let the only limit of your research be your curiosity.

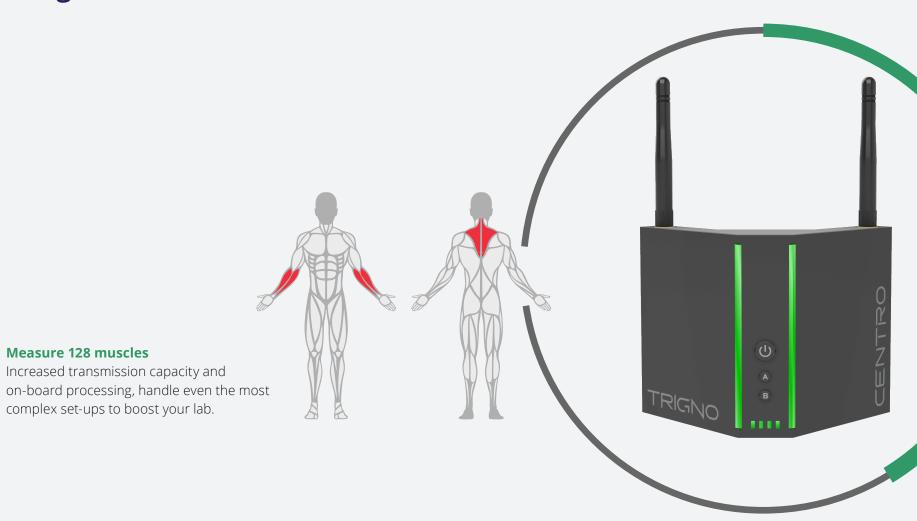
**Measure 128 muscles** 

Increased transmission capacity and

complex set-ups to boost your lab.

DELSYS.COM

# Built on the past, informed by the present, designed for the future.





# **Expandable Wireless Platform**

Gold standard EMG, mini and multi-headed sensors, motor unit decomposition, HDsEMG and physiological sensors all combined within one system.



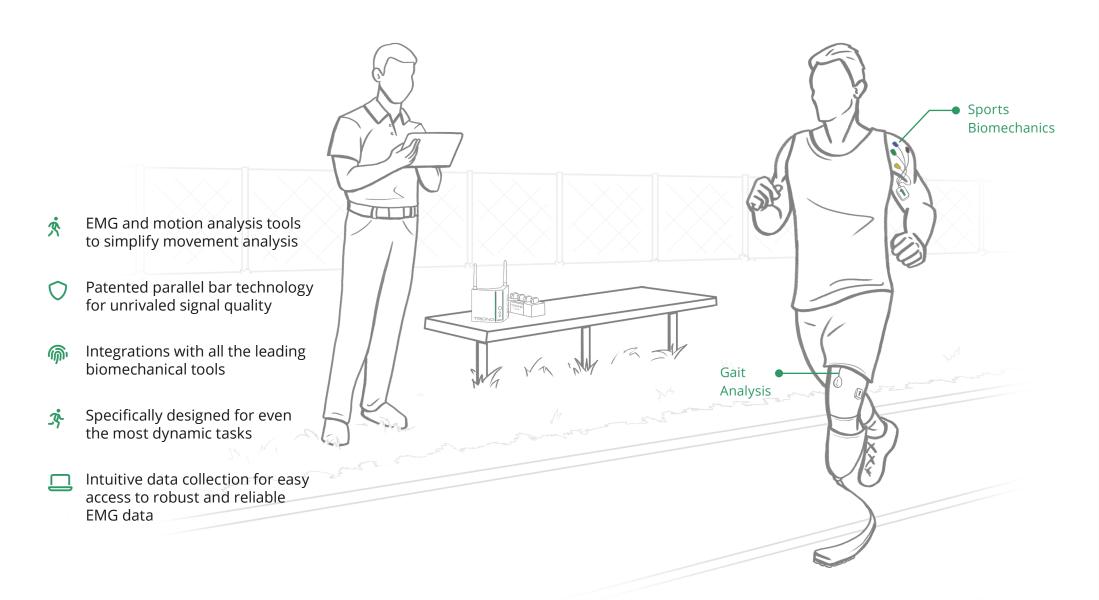
# **Advanced in-built integrations**

Empowering researchers to combine any tool with simple, flexible, and customizable integration options.

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# **MOVEMENT SCIENCES**

# **Unravel the Dynamics of Human Biomechanics**





Trigno Avanti Sensor Combined EMG and IMU

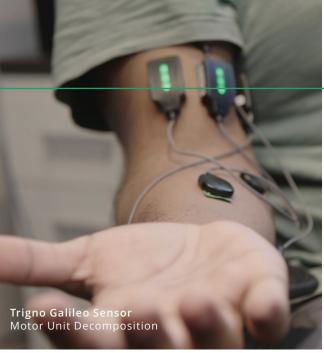


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# **ENGINEERING**

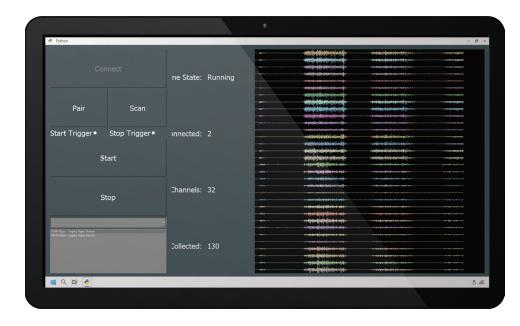
# Next Generation Neural Interfacing and Human Augmentation

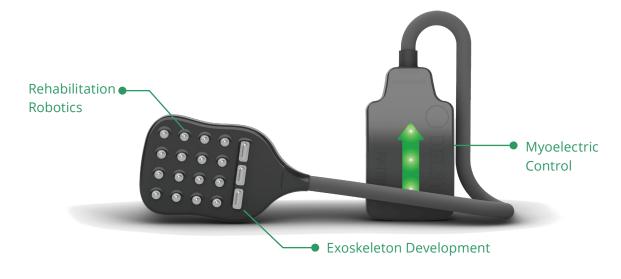
- Wireless sensing for low latency real-time assessment and myoelectric control
- Compatible with Windows and Linux
- Custom coding pathways in Python, C#, and Unity





# Increased data with HDsEMG for increased accuracy of pattern recognition





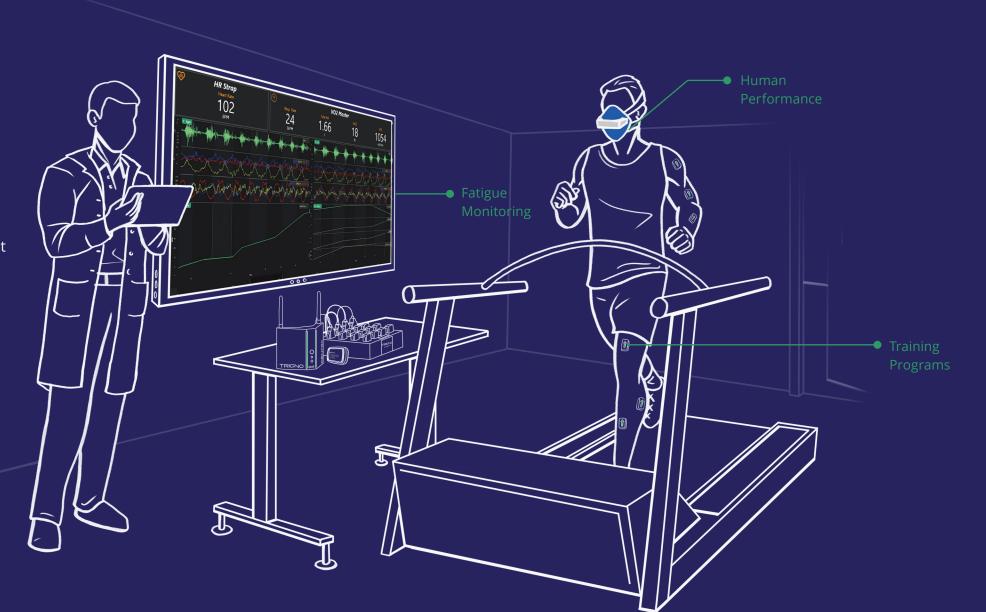


√- EXERCISE PHYSIOLOGY

# **Take Your Research Further and Break New Ground in Exercise Physiology**

Analyze human movement with integrative technologies EMG | VO<sub>2</sub> | SmO2 | Heart Rate

- Lightweight and portable solutions supporting lab-based assessments in any environment
- Combine biomechanics and physiology
- Unified software experience
- Integrated & synchronized wireless sensing



12 DELSYS.COM INNOVATING HUMAN MOVEMENT. INSPIRING DISCOVERY.



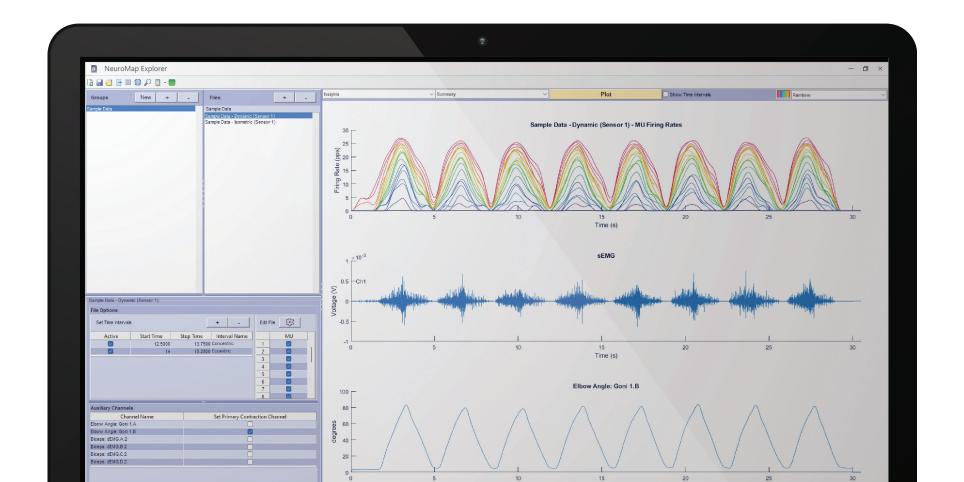
**MOTOR CONTROL** 

# **Dive Deep into Understanding Motor Control**

Delsys High Density EMG technologies deliver unmatched precision and accuracy, allowing for a more detailed analysis of neural drive and muscle behavior than ever before. Neural Plasticity | Neuromuscular Physiology | Neuromechanics

- Insights into Neural Drive
  Quickly and accurately identify
  uncontaminated motor units.
- Functional Data Collection

  Analyze motor unit data from dynamic movement like never before.
- Dry electrode and easy application for long lasting results that don't compromise on signal quality.





Human-Computer Interactions | Telehealth | Digital Twins

The Trigno® Wireless Biofeedback System is a battery-powered biofeedback device that enables researchers to acquire EMG and related signals from individuals for research and wellness purposes. When directed by a physician the information can be used for relaxation training and muscle reeducation. The system is not designed for diagnostic or therapeutic applications. Interpretation of the EMG and supporting signals by a qualified individual is required.

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