



core EMG

Streamlined Surface EMG

- Small, lightweight sensors
- Direct Connect sensor design
- Data recovery with Lossless technology



NORAXON®

The Core EMG System

Compact wireless EMG designed for simple setup and reliable data collection.



Direct Connect Sensors

Capture EMG directly at the electrode site – no leads required.

Wireless & Lightweight

Small sensor design supports fast setup and comfortable measurements.

2,000 Hz Sampling

High-quality EMG recording for accurate muscle activity analysis.

Lossless Data Capture

Embedded memory safeguards data integrity during every recording.

Flexible System Configurations

Configure your system with 1–16 EMG sensors to match your measurement needs.

Integrated Movement Technology

Integrate Core EMG with other systems in Noraxon's multi-device platform to enhance common applications such as:



**Symmetry &
Coordination
Tests**



**Average
Activation
Patterns**



**EMG
Amplitude
Analysis**



**Pelvic
Floor
Therapy**



**Biofeedback
Training**



**Gait
Analysis**



**Isokinetic
Testing**

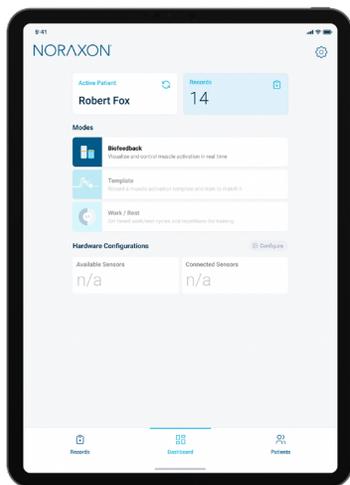


Engineering

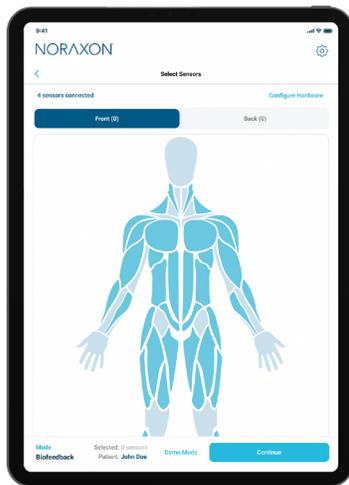
Portable Biofeedback for Everyday Practice

The Noraxon Biofeedback App pairs with Core EMG sensors to deliver real-time muscle activity feedback during rehabilitation and movement training.

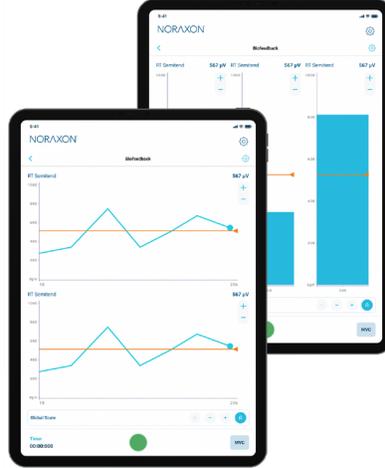
With direct Bluetooth connectivity—no receiver required, clinicians can start EMG biofeedback sessions quickly using a phone or tablet.



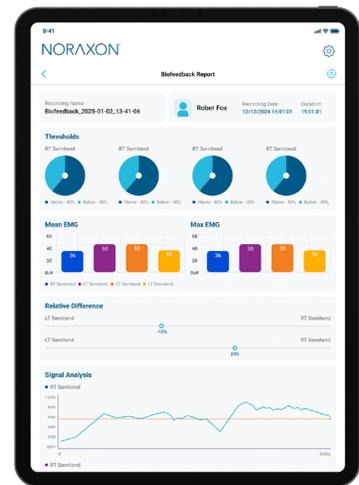
View Dashboard & Select a Mode



Assign Sensors to Muscles



View Real-time Data



Generate & Share Reports

All-in-One Biomechanics Software

Seamlessly collect and combine a variety of data within a unified software platform. From real-time collection to post-processing and reporting, everything works together in one environment.

- Comprehensive signal processing tools
- Customizable analysis reports
- Multi-device synchronization
- Multiple data export formats
- HTTP & UDP streaming functionality



Device Integration



TECHNICAL DATA

POWER AND SYNCHRONIZATION

Sensor

- Replaceable Li-ion coin cell battery
- 4-hour operational runtime
- 3-hour charge time

Hub

- Power, charging, and data transfer by USB-C
- Accepts 2-5 V TTL sync input

DATA TRANSMISSION

- 2.4 GHz wireless and Bluetooth Low Energy
- 30 m wireless transmission range

DATA ACQUISITION

- 2000 Hz sample rate
- 20 Hz high-pass cutoff
- 500 Hz low-pass cutoff
- No notch (50/60 Hz) filters
- $\pm 24,000$ μV input range
- 24-bit ADC with dynamic resolution

EMG SIGNAL QUALITY

- <2 μV RMS baseline noise
- >90 dB CMRR

DATA RECOVERY

- 125 MB onboard memory (up to 8 hours of storage)
- High-speed data transfer via sensor dock

SIZE AND WEIGHT

Sensor

- 42 x 30 x 12.5 mm (LxWxH)
- 15 g

Hub

- 170 x 60 x 113 mm (LxWxH)
- 145 g



Scan to learn more