

Biosensor Add-Ons

TBSI offers three biosensor options for use with a wireless recording headstage of any channel count. Each biosensor samples and transmits data in place of one or more neural recording channels. You can choose to install any combination of unique biosensors into a wireless or tethered headstage package.*

Headstage Dimension Adjustments**

- Length: +.4"
- Width: +.2"

Accelerometer

- X, Y, Z data collection
- Replaces 3 channels
- Weight: .4g

Microphone

- 30-35kHz frequency range
- Replaces 1 channel
- Weight: .3g

Thermistor

- 0-70°C temperature range
- Biocompatible
- Replaces 1 channel
- Weight: .1g

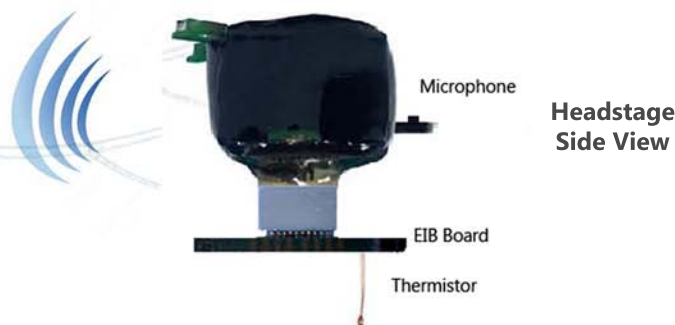
The accelerometer PCB accessory will monitor x, y and z acceleration at the headstage and output this analog information using 3 active headstage channels. The data can later be analyzed in software to determine head velocity and position.

The microphone accessory will produce the best data when combined with the 16ch wireless headstage which can sample analog channels at 100kHz. All other wireless headstages sample at 50kHz and will limit the microphone bandwidth to 25kHz instead of 35kHz.

This option includes one external small thermistor, implantable with EIB interface or placeable outside the animal. The thermistor accessory has a temperature range of 0 to 70 degrees celsius. The length of the thermistor's tether should be specified at the time of purchase.



Analog
Signal Receiver



Headstage
Side View

*Biosensors can be added to recording systems after they are manufactured, but installation will incur additional fees.

**Please refer to a particular headstage's brief for its dimensions without a biosensor PCB.