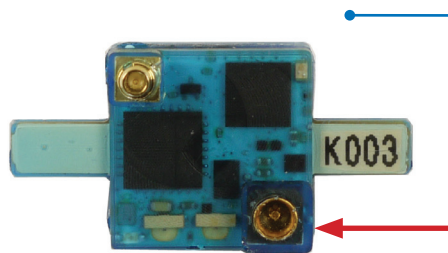


● **W2100-HS16 Headstage**

● **W2100-Headstage for Use with the W2100-System**



Advantages

- Small-sized headstage with integrated A/D converter and LED lights for video tracking.
- The W2100-System converts the recorded signals into digital data already on the headstage.
- The signal-to-noise ratio is excellent and most important, independent from the distance between sender and receiver.
- The headstage is equipped with a triaxial gyroscope and a triaxial accelerometer by default.

W2100-HS16 top side

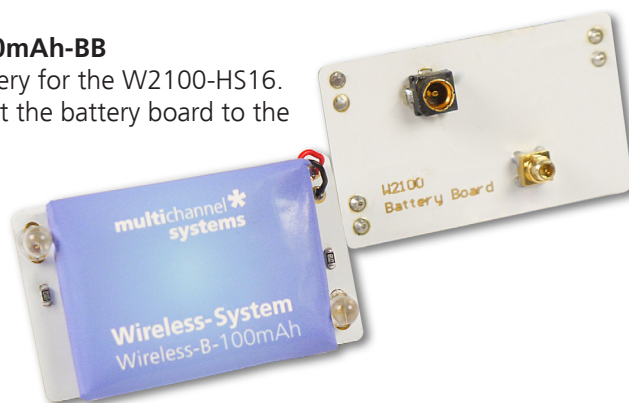
Please use the connector for the storage battery in the lower right for orientation of the headstage.

Applications

The W2100 headstage is the ideal solution for the measurement of spikes, LFP, EEG, ECG, EMG, and ECoG. Additional inputs to the interface board allow the synchronization of the data with external devices.

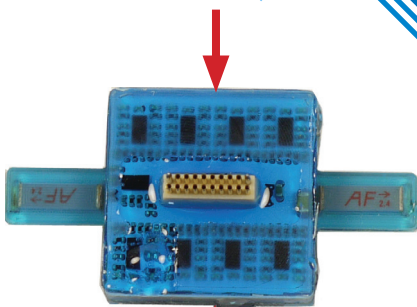
W2100-B-100mAh-BB

Standard battery for the W2100-HS16. Please connect the battery board to the headstage.



W2100-HS16 Headstage

Technical Specifications

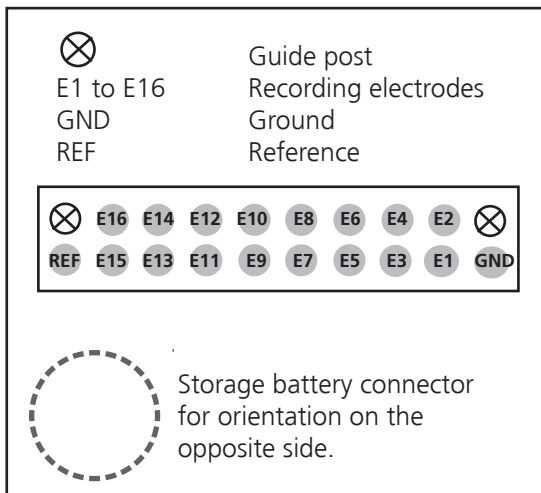


W2100-HS16 bottom side
Connector for the electrode probe or for the ME/W-Signal generator.

Important: To handle the headstage, please touch the body, but not the antennae.

W2100-HS16 with Omnetics connector

Diagram of the bottom side with pin layout. Please orientate the headstage as shown in the diagram.



Connector for this Headstage Omnetics socket A79039-001

This Omnetics connector mates with Omnetics connectors such as:
Through-Hole:
A79038-001 (NPD-18-DD-GS)
Horizontal Surface Mount:
A79040-001 (NPD-18-AA-GS)
Vertical Surface Mount:
A79042-001 (NPD-18-VV-GS)
Cable: A79044-001

Technical Specifications

Number of recording channels	16
Weight (without battery)	± 2.9 g
Dimensions (W x D x H) w/o antennae	15.5 mm x 15.5 mm x 5.2 mm
Distance for wireless link	5 m and more under normal conditions

Amplifier

Bandwidth: To avoid aliasing effects, the low pass depends on the sampling frequency:

High pass	1 Hz (0.1 Hz on request)			
Low pass	400 Hz	800 Hz	1 kHz	5 kHz
@ Sampling rate	@ 1 kHz	@ 2 kHz	@ 5 kHz	@ 10 - 40 kHz

Gain	101
Input impedance	1 GΩ 10 pF
Resolution	16 bit
Input voltage range	± 12.4 mV
Input noise	< 1.9 μV _{RMS}

Sampling rate (max.) in kHz

	2	4	8	16
Single Headstage Mode	40	40	25	25
Multi Headstage Mode	10	10	10	5

Software

Operating system	Windows ® 10, 8.1 (64 bit)
Data acquisition, analysis and export software	Multi Channel Suite Version 1.5.1 and higher