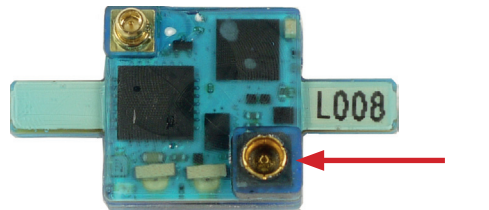


## W2100-HS8-SR Headstage

### W2100-Headstage with Single Row Connector for Use with the W2100-System



#### W2100-HS8-SR top side

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

#### 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.

#### Applications

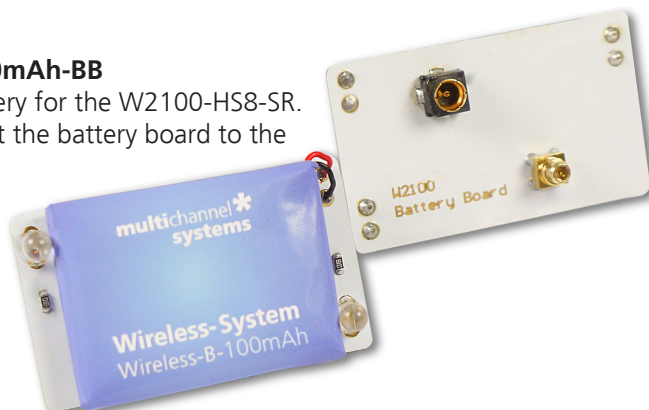
The W2100 headstage is the ideal solution for the measurement of spikes, LFP, EEG, ECG, EMG, and ECoG. Additional inputs to the interface board allow the synchronization of the data with external devices.

#### Gyroscope and Accelerometer

The W2100 headstage is equipped with triaxial gyroscope and accelerometer sensors, which allow synchronisation with electrophysiological data.

#### W2100-B-100mAh-BB

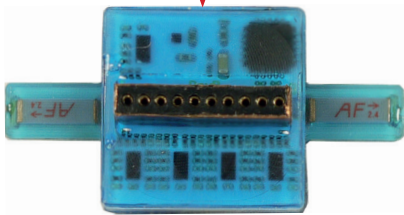
Standard battery for the W2100-HS8-SR. Please connect the battery board to the headstage.



## W2100-HS8-SR Headstage

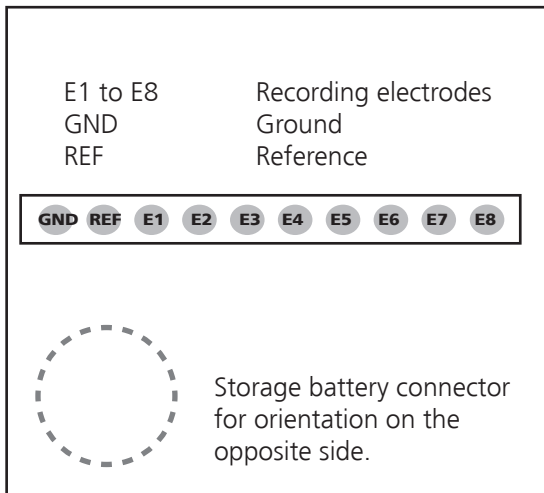
### Technical Specifications

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



**W2100-HS8-SR** with single row connector bottom side  
Connector for the electrode probe or for the ME/W-Signal Generator.

**W2100 Headstage with single row connector**  
Diagram of the bottom side with pin layout. Please orientate the headstage as shown in the diagram.



**Connector for this Headstage single row precession socket**  
(1.27 mm, round pin)  
**Preci-Dip 851-87-010-10-001101**

The connector mates with a standard single row 1.27 mm pin connector such as:  
Preci-Dip 850-10-010-10-001101  
www.fischerelektronik.de: SLR 1 025  
Mill-Max .050" Grid, Series 850, 851, 852, 853 (MMMCS00609-1)

### Technical Specifications

Number of recording channels	8
Weight (without battery)	± 3.0 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 <sub>RMS</sub>
<b>Sampling rate (max.) in kHz</b>	<b>Number of channels simultaneously</b>

	<b>2</b>	<b>4</b>	<b>8</b>
Single Headstage Mode	40	40	25
Multi Headstage Mode	10	10	10

### Inertial Measurement Unit

Gyroscope, triaxial	± 8 g    @ 16 bit resolution
Accelerometer, triaxial	1000 %/s @ 16 bit resolution

### Software

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