

OT Bioelettronica offers a set of adhesive matrices for surface electromyographic acquisitions. The electrode grids are present in 5 different formats with different inter-electrode distance (IED). The electrode matrices must be placed by interposing the double-sided adhesive foam certified for use in contact with the skin according to ISO 10993-1 between the matrix and the intact skin. The double-sided adhesive foams have holes corresponding to the electrode site that must be filled with conductive cream to create the contact between skin and electrodes.

Materials

**Material information**

Supporting material	Kapton and FR4		
Sensor	Cu + chemical gilding		
Connector	Kapton with gold contacts		
<b>Packaging</b>	<b>Material</b>	<b>Content</b>	<b>L x W x H (mm)</b>
Product packaging	Paper/PE	1 piece	24 x 16 x 2
Department packaging	Paper cardboard	1 piece	19 x 19 x 6

Health

**Biocompatibility**

Latex	No
Phthalates	No
CE Marking	MDR 2017/745
RoHS	In compliance
CND	<b>N010101</b>

Technical Features

Number of grid models	14	
Generic Code	HDXXMMXXYY (XX=IED in mm, YY=n. of rows, ZZ=n. of columns)	
<b>Models</b>		
OT0304	HD02MM0808	64 electrodes with IED 2mm, 8 rows x 8 cols
OT0309	HD02MM1305	64 electrodes with IED 2mm, 13 rows x 5 cols
OT0305	HD04MM0808	64 electrodes with IED 4mm, 8 rows x 8 cols
OT0171	HD04MM1305	64 electrodes with IED 4mm, 13 rows x 5 cols
OT0307	HD04MM1606	96 electrodes with IED 4mm, 16 rows x 6 cols
OT0289	HD05MM0804	32 electrodes with IED 5mm, 8 rows x 4 cols
OT0270	HD05MM3201	32 electrodes with IED 5mm, 32 rows x 1 col
OT0282	HD08MM1106	64 electrodes with IED 8mm, 11 rows x 6 cols
OT0170	HD08MM1305	64 electrodes with IED 8mm, 13 rows x 5 cols
OT0281	HD08MM1606	96 electrodes with IED 8mm, 16 rows x 6 cols
OT0168	HD10MM0804	32 electrodes with IED 10mm, 8 rows x 4 cols
OT0169	HD10MM0808	64 electrodes with IED 10mm, 8 rows x 8 cols
OT0276	HD10MM1103	32 electrodes with IED 10mm, 11 rows x 3 cols
OT0172	HD20MM1602	32 electrodes with IED 20mm, 16 rows x 2 cols
Connector	Zif	
Thickness	1,5 mm	
<b>Electrical characteristics</b>		
Electrode-skin impedance range	10-200 kohm	

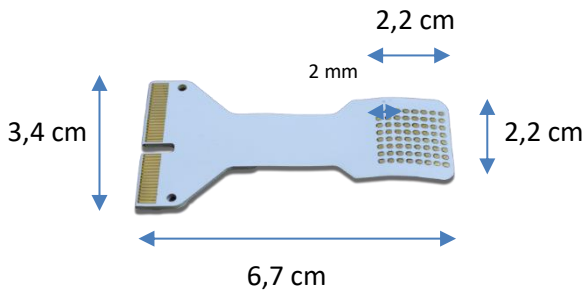
**Cleaning**

Any residual of conductive cream must be removed from the electrode surface after use. Long exposition to liquids and cream can oxidate the surface of the electrodes by increasing the contact impedance and resulting in a poor signal quality. A dry cloth can be used to remove the conductive cream and dry the electrodes surface. Alcohol can be used to disinfect the electrode matrices.

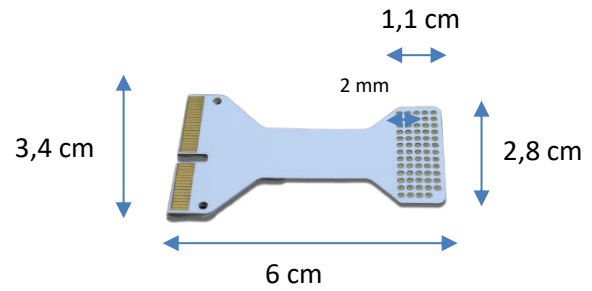
**Sensing area**

The sensing area determining the electrode-skin impedance is the foam holes area. The interface between conductive cream and the electrode on the matrices has negligible impedance compared to the interface between skin and conductive cream.

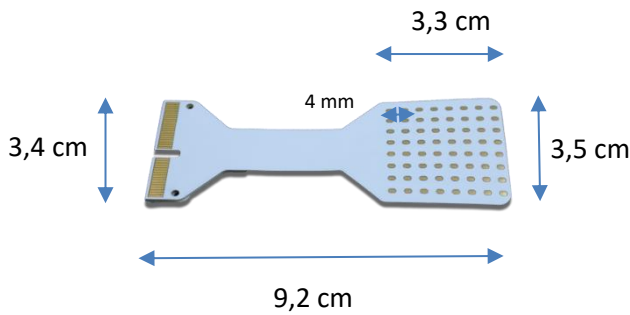
HD02MM0808



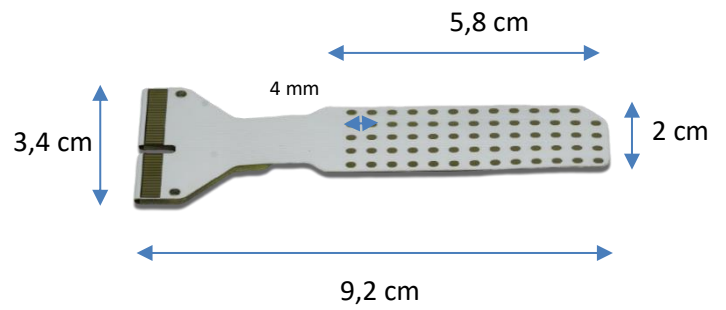
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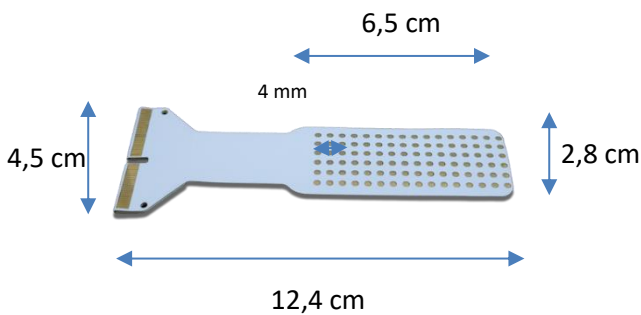
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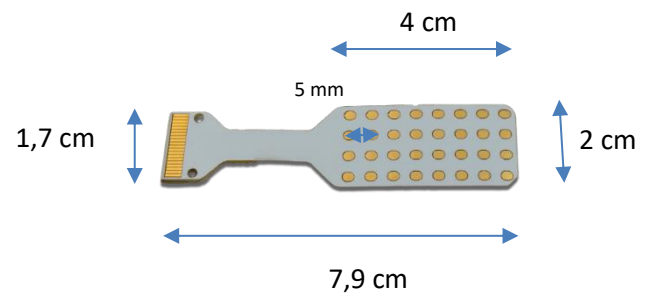
HD04MM1305



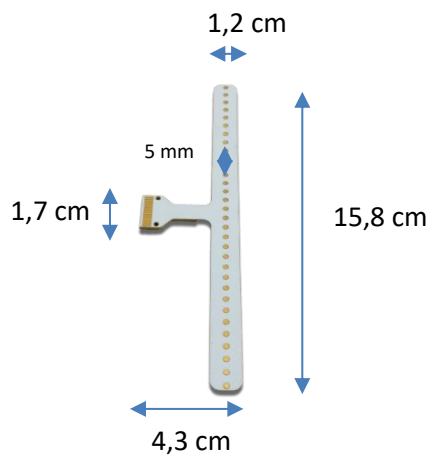
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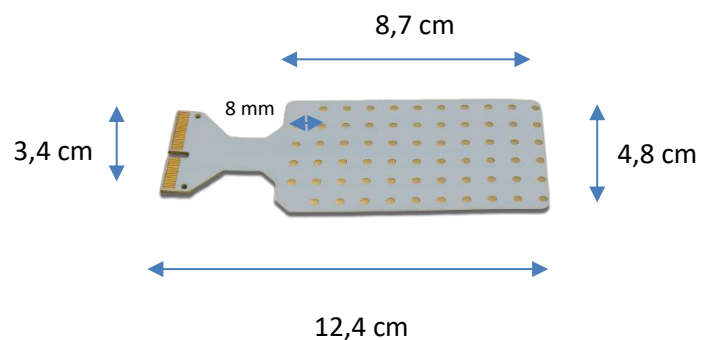
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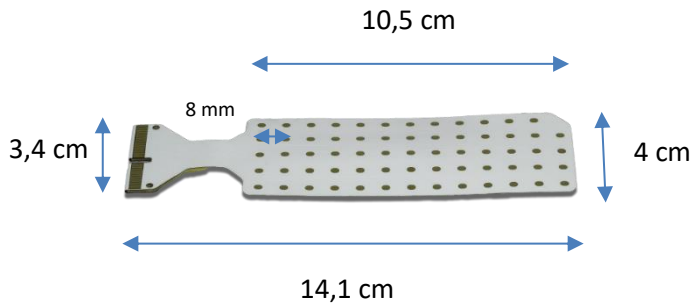
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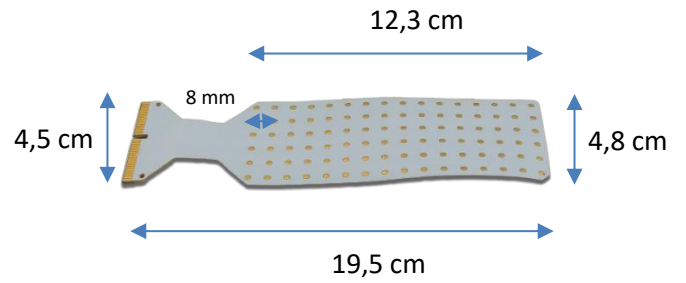
HD08MM1106



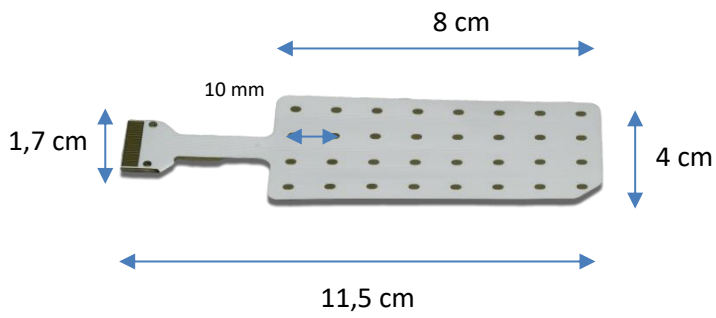
HD08MM1305



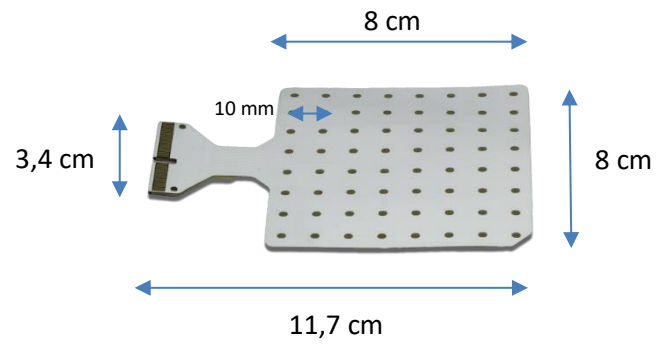
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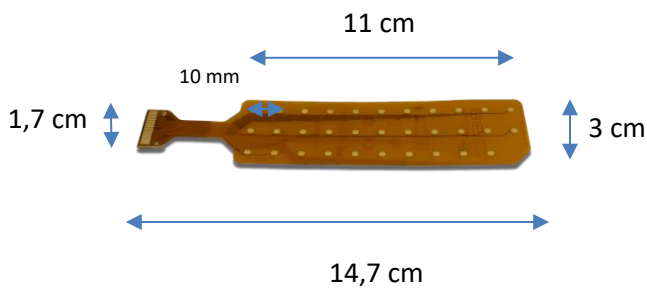
HD10MM0804



HD10MM0808



HD10MM1103



HD20MM1602

