



# EEG accessories MCScap

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Data sheets

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2020

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# **Section 1**

## **EEG set**



DATA SHEET

# Electrode cap CLINIC

Printed textile cap with 21 preinstalled Ag/AgCl electrodes MCScap-C with DB-25M common connector

Article	Size	Head circumference
003-1-001	XL	60-66 cm
003-1-002	XL/L	57-63 cm
003-1-003	L	54-60 cm
003-1-004	L/M	51-57 cm
003-1-005	M	48-54 cm
003-1-006	M/S	45-51 cm
003-1-007	S	42-48 cm



## AREA OF APPLICATION

Routine EEG

## SET

- Electrode cap CLINIC
- EEG starter kit
- User manual

## DESCRIPTION

Electrode cap CLINIC is a printed textile cap with 21 preinstalled Ag/AgCl electrodes MCScap-C with DB-25M common connector, cable length 150 cm. The electrode cap is designed for non-invasive registration EEG and use with electroencephalographs and other amplifiers of biological signals.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap are made of colored material for simplified identification size and are marked according to system 10-10.

MCScap-C electrode is shaped like a bowl with a wide skirt. This shape of the electrode allows you to achieve a tighter fit to the patient's head and provides comfort during the research, and also does not allow the electrode gel to flow out of the electrode. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base.

## TECHNICAL DATA

Electrode



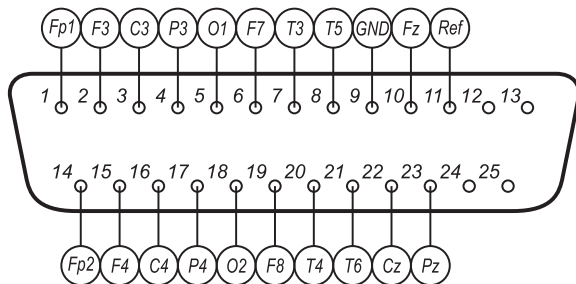
MCScap-C



Material of electrode conductive surface	Ag/AgCl
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	10 mm
Surface area of contact of the electrode substance with the skin	78.5 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15 mm
Distance from the skin to the electrode conductive surface	3.5 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode positioning system	10-10
Connector type	DB25M
Cable length	150 cm
Location of the output of the electrode cable from cap	Back of the head
Number of electrodes	21
Electrode positions	Fp1, Fp2, F3, F4, C3, C4, P3, P4, O1, O2, F7, F8, T7(T3), T8(T4), P7(T5), P8 (T6), Cz, Fz, Pz, GND, Ref
Marking of textile cap	yes
Marking of electrodes	yes
Weight	700 g

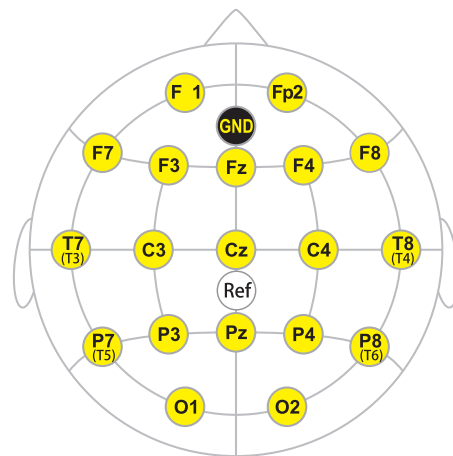
Information for reference only

**MAIN PIN LAYOUTS OF COMMON CONNECTOR**



R23-01 (21 electrodes)

**EEG ELECTRODE ARRAY**



R23 (21 electrodes)

For information about other possible pin layouts and EEG electrode arrays, contact the manufacturer

## Electrode cap SLEEP

Printed textile cap with 21 preinstalled Ag/AgCl sintered electrodes MCScap-T with DB-25M common connector

Article	Size	Head circumference
003-2-001	XL	60-66 cm
003-2-002	XL/L	57-63 cm
003-2-003	L	54-60 cm
003-2-004	L/M	51-57 cm
003-2-005	M	48-54 cm
003-2-006	M/S	45-51 cm
003-2-007	S	42-48 cm
003-2-008	S/XS	39-45 cm
003-2-009	XS	36-42 cm
003-2-010	Inf I	32-36 cm
003-2-011	Inf II	28-32 cm
003-2-012	Inf III	24-28 cm



### AREA OF APPLICATION

Routine EEG, sleep EEG, research EEG, high resolution EEG, TMS-EEG

### SET

- Electrode cap SLEEP
- EEG starter kit
- User manual

### DESCRIPTION

Electrode cap SLEEP is a printed textile cap with 21 preinstalled Ag/AgCl sintered electrodes MCScap-T with DB-25M common connector, cable length 150 cm. The electrode cap is designed for non-invasive registration EEG and use with electroencephalographs and other amplifiers of biological signals.


Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile caps are made of colored material for simplified identification size and are marked according to system 10-10.

MCScap-T electrode is designed for maximum patient comfort during examination in lying down position, for example, during sleep EEG or for examination of newborns. The design of this electrode is the most preferred for conducting combined TMS-EEG studies. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are

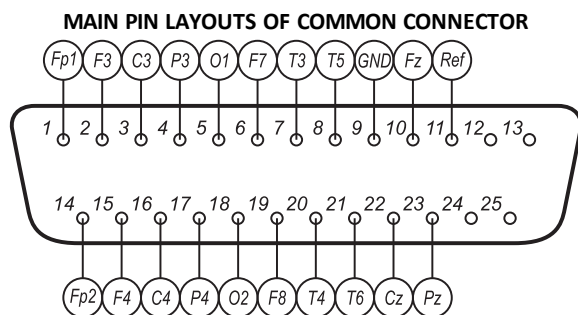


made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Use with conductive paste is possible. Electrode have additional labeling what makes easy to rearrange them to new textile base.

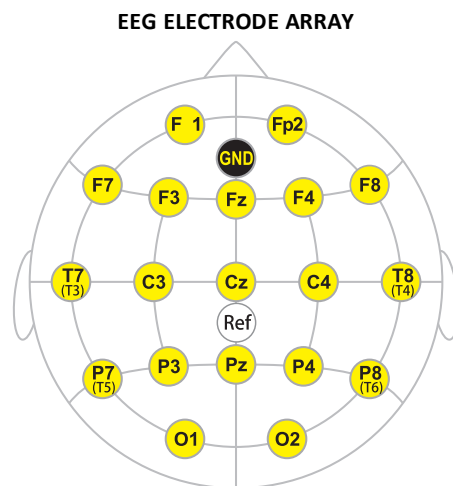
## TECHNICAL DATA

Electrode	 MCScap-T
Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	7 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	6 mm
Surface area of contact of the electrode substance with the skin	28.3 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.5 mm
Distance from the skin to the electrode conductive surface	1.6 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode positioning system	10-10
Connector type	DB-25M
Cable length	150 cm
Location of the output of the electrode cable from cap	Top of the head
Number of electrodes	21
Electrode positions	Fp1, Fp2, F3, F4, C3, C4, P3, P4, O1, O2, F7, F8, T7(T3), T8(T4), P7(T5), P8(T6), Cz, Fz, Pz, GND, Ref
Marking of textile cap	yes
Marking of electrodes	yes
Weight	800 g

*Information for reference only*



R23-01 (21 electrodes)



R23 (21 electrodes)

For information about other possible pin layouts and EEG electrode arrays, contact the manufacturer



# Electrode cap PROFESSIONAL

Printed textile cap with 21 preinstalled Ag/AgCl sintered electrodes MCScap-NTC with DB-25M common connector

Article	Size	Head circumference
003-3-001	XL	60-66 cm
003-3-002	XL/L	57-63 cm
003-3-003	L	54-60 cm
003-3-004	L/M	51-57 cm
003-3-005	M	48-54 cm
003-3-006	M/S	45-51 cm
003-3-007	S	42-48 cm



## AREA OF APPLICATION

Routine EEG, research EEG, high resolution EEG

## SET

- Electrode cap PROFESSIONAL
- EEG starter kit
- User manual
- Bag

## DESCRIPTION


Electrode cap PROFESSIONAL is a printed textile cap with 21 preinstalled Ag/AgCl sintered electrodes MCScap-NTC with DB-25M common connector, cable length 150 cm. The electrode cap is designed for non-invasive registration EEG and use with electroencephalographs and other amplifiers of biological signals.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap are made of colored material for simplified identification size and are marked according to system 10-10.

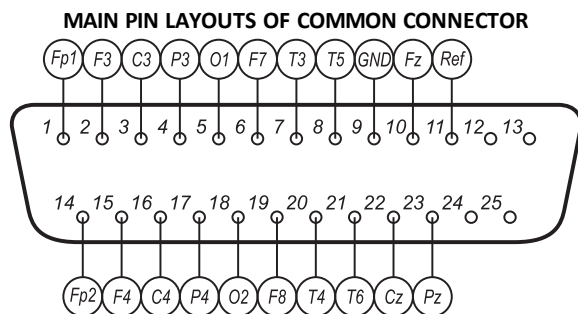
MCScap-NTC electrode is shaped like a bowl with a wide skirt. This form of the electrode allows for a tighter fit to the patient's head and provides comfort throughout the study, and also does not allow the electrode gel to flow out of the electrode body. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. Solid silicone tubes extend life wires electrodes.



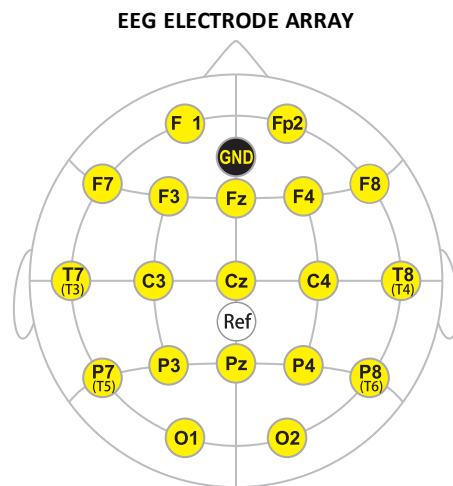
**TECHNICAL DATA**

Electrode	 MCScap-NTC
Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	10 mm
Surface area of contact of the electrode substance with the skin	78.5 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15 mm
Distance from the skin to the electrode conductive surface	3.2 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode positioning system	10-10
Connector type	DB25M
Cable length	150 cm
Location of the output of the electrode cable from cap	Back of the head
Number of electrodes	21
Electrode positions	Fp1, Fp2, F3, F4, C3, C4, P3, P4, O1, O2, F7, F8, T7(T3), T8(T4), P7(T5), P8 (T6), Cz, Fz, Pz, GND, Ref
Marking of textile cap	yes
Marking of electrodes	yes
Weight	900 g

Information for reference only



R23-01 (21 electrodes)



R23 (21 electrodes)

For information about other possible pin layouts and EEG electrode arrays, contact the manufacturer

## ELECTRODE SET classic

Universal kit of 26 removable Ag/AgCl sintered electrodes MCScap-E with TouchProof 1.5 mm (DIN 42 802-ST) connectors and 2 textile cap MCScap 10-20 with fixing rings

### Article

003-4-001



### AREA OF APPLICATION

Routine EEG, research EEG

### SET

- Textile caps 10-20 with fixing rings - 2 pcs.
- Electrodes MCScap-E - 26 pcs.
- Labels for marking electrodes
- Ear fixators MCScap-A
- EEG starter kit
- User manual
- Bag

### DESCRIPTION


ELECTRODE SET classic is a universal kit of 26 removable Ag/AgCl sintered electrodes MCScap-E with TouchProof 1.5 mm (DIN 42 802-ST) connectors and 2 textile cap MCScap 10-20 with fixing rings. The electrode cap is designed for non-invasive registration EEG and use with electroencephalographs and other amplifiers of biological signals.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap are made of colored material for simplified identification size and are marked according to system 10-10.

MCScap-E electrode is designed for research that requires frequent installation and quick removal of electrodes for cleaning and disinfection. Used with MCScap textile caps with fixing rings. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base.



## TECHNICAL DATA

Electrode	 MCScap-E
Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	4 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15.8 mm
Distance from the skin to the electrode conductive surface	0.7 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode positioning system	10-10
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Cable length	120 cm
Location of the output of the electrode cable from cap	Back of the head
Number of electrodes	26
Electrode positions	custom
Marking of textile cap	yes
Marking of electrodes	labels are included
Number of textile caps included	2
Cap sizes available	XL (60-66 cm) XL/L (57-63 cm) L (54-60 cm) L/M (51-57 cm) M (48-54 cm) M/S (45-51 cm) S (42-48 cm) S/XS (39-45 cm) XS (36-42 cm)
Weight	1000 g

*Information for reference only*





# **Section 2**

# **Electrodes**

## MCScap-E electrode

Point Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-101



### AREA OF APPLICATION

Routine EEG, research EEG

### SET

– MCScap-E electrode

### DESCRIPTION

MCScap-E electrode is a point Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. MCScap-E electrode is designed for research that requires frequent installation and quick removal of electrodes for cleaning and disinfection. Used with MCScap textile caps with fixing rings. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	4 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15.8 mm
Distance from the skin to the electrode conductive surface	0.7 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	7 g

*Information for reference only*



## MCScap-T electrode

Thin cup Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-102



### AREA OF APPLICATION

Routine EEG, sleep EEG, research EEG, high resolution EEG, TMS-EEG

### SET

– MCScap-T electrode

### DESCRIPTION

MCScap-T electrode is a thin cup Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. MCScap-T electrode is designed for maximum patient comfort during examination in lying down position, for example, during sleep EEG or for examination of newborns. The design of this electrode is the most preferred for conducting combined TMS-EEG studies. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Use with conductive paste is possible. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	7 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	6 mm
Surface area of contact of the electrode substance with the skin	28.3 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.5 mm
Distance from the skin to the electrode conductive surface	1.6 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	4 g

*Information for reference only*



## MCScap-NT electrode

Cup Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-103



### AREA OF APPLICATION

Routine EEG, research EEG, high resolution EEG

### SET

– MCScap-NT electrode

### DESCRIPTION

MCScap-NT electrode is a cup Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. MCScap-NT electrode is designed for research requiring increased patient comfort for a long time. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Use with conductive paste is possible. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.9 mm
Distance from the skin to the electrode conductive surface	1.1 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	4 g

*Information for reference only*



## MCScap-NTC electrode

Cup with skirt Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-104



### AREA OF APPLICATION

Routine EEG, research EEG, high resolution EEG

### SET

– MCScap-NTC electrode

### DESCRIPTION

MCScap-NTC electrode is a cup with skirt Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. MCScap-NTC electrode is shaped like a bowl with a wide skirt. This form of the electrode allows for a tighter fit to the patient's head and provides comfort throughout the study, and also does not allow the electrode gel to flow out of the electrode body. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	10 mm
Surface area of contact of the electrode substance with the skin	78.5 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15 mm
Distance from the skin to the electrode conductive surface	3.2 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm

*Information for reference only*



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Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	4 g

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*Information for reference only (continued)*



## MCScap-NTH electrode

Hight cup Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-105



### AREA OF APPLICATION

Routine EEG, hight resolution EEG

### SET

– MCScap-NTH electrode

### DESCRIPTION

MCScap-NTH electrode is a hight cup Ag/AgCl sintered electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. MCScap-NTH electrode is shaped like a high bowl, which provides tighter contact with the patient's skin in thick hair. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	7 mm
Surface area of contact of the electrode substance with the skin	38.5 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.4 mm
Distance from the skin to the electrode conductive surface	3.7 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	5 g

*Information for reference only*



## MCScap-C electrode

Cup with skirt Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-106



### AREA OF APPLICATION

Routine EEG

### SET

– MCScap-C electrode

### DESCRIPTION

MCScap-C electrode is a cup with skirt Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. MCScap-C electrode is shaped like a bowl with a wide skirt. This shape of the electrode allows you to achieve a tighter fit to the patient's head and provides comfort during the research, and also does not allow the electrode gel to flow out of the electrode. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	10 mm
Surface area of contact of the electrode substance with the skin	78.5 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15 mm
Distance from the skin to the electrode conductive surface	3.5 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)

*Information for reference only*





Weight

4 g

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*Information for reference only (continued)*



## MCScap-TC electrode

Cup Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-115



### AREA OF APPLICATION

Routine EEG

### SET

– MCScap-TC electrode

### DESCRIPTION

MCScap-TC electrode is a cup Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. The shape of the MCScap-TC electrode provides increased patient comfort during the study for a long time. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.9 mm
Distance from the skin to the electrode conductive surface	1.1 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	4 g

*Information for reference only*



## MCScap-CS22 electrode

Ag/AgCl electrode for transcranial electrostimulation (tDCs / tACs) and EEG recording 22 mm in diameter, with TouchProof 1.5 mm connector, wire length 120 cm

### Article

003-0-107



### AREA OF APPLICATION

Transcranial electrical stimulation (TES, tACS), EEG

### SET

– MCScap-CS22 electrode

### DESCRIPTION

MCScap-CS22 electrode is a Ag/AgCl electrode for transcranial electrostimulation (tDCs / tACs) and EEG recording 22 mm in diameter, with TouchProof 1.5 mm connector, wire length 120 cm. MCScap-CS22 is a reusable electrode with a diameter of 22 mm of Ag/AgCl composite, designed for carrying out transcranial electrical stimulation (TES), mainly by alternating current (tACS - transcranial alternating current stimulation), and recording the electroencephalogram (EEG). The electrode is an electrically conductive disk with a hole in the center, surrounded by a molded case with an elastic skirt ring, providing a comfortable fit to the skin and an increased contact area. The CS22 electrodes are designed for installation in MCScap 10-20 and MCScap 10-10 textile caps. The electrodes are fixed on the inside of the cap, and the wires are released through the ventilation holes. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	176 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	22 mm
Surface area of contact of the electrode substance with the skin	380 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	26 mm
Distance from the skin to the electrode conductive surface	2.5 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Own noise of an electrode in the mode of registration of EEG in a range 0,5...30 Hz	less then 2 $\mu$ V
Electrode polarization in EEG recording mode	$\leq$ 10 mV
Maximum allowed current through the electrode in the stimulation mode	10 mA
Maximum operating voltage	100 V
Electrode polarization	$\leq$ 50 mV



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Resistance of electrodes insulation	$\geq 1000 \text{ M}\Omega$
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	$\leq 5 \text{ k}\Omega$
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	4 g

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*Information for reference only*



## Ear electrodes ELECTRODE SET

Set of MCScap-E electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-A

### Article

003-0-108



### AREA OF APPLICATION

Routine EEG, research EEG

### SET

- MCScap-E electrodes - 2 pcs.
- MCScap-A ear fixators - 2 pcs.

### DESCRIPTION

Ear electrodes BASE is a set of MCScap-E electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-A. MCScap-E electrode is designed for research that requires frequent installation and quick removal of electrodes for cleaning and disinfection. Used with MCScap textile caps with fixing rings. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base.

MCScap-A ear fixator is specifically designed for point electrodes MCScap-E. The fixator tightly presses the electrode to the ear lobe and does not cause discomfort to the patient.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	4 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15.8 mm
Distance from the skin to the electrode conductive surface	0.7 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ



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Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Material of ear fixator	polyurethane
Weight	20 g

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*Information for reference only*



## Ear electrodes SLEEP

Set of MCScap-T electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-AT

### Article

003-0-109



### AREA OF APPLICATION

Routine EEG, sleep EEG, research EEG, high resolution EEG, TMS-EEG

### SET

- MCScap-T electrodes - 2 pcs.
- MCScap-AT ear fixators - 2 pcs.

### DESCRIPTION

Ear electrodes SLEEP is a set of MCScap-T electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-AT. MCScap-T electrode is designed for maximum patient comfort during examination in lying down position, for example, during sleep EEG or for examination of newborns. The design of this electrode is the most preferred for conducting combined TMS-EEG studies. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Use with conductive paste is possible. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	7 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	6 mm
Surface area of contact of the electrode substance with the skin	28.3 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.5 mm
Distance from the skin to the electrode conductive surface	1.6 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	150 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)

*Information for reference only*



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Material of ear fixator	polyurethane
Weight	10 g

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*Information for reference only (continued)*





## Ear electrodes PROFESSIONAL

Set of MCScap-NT electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-AT

### Article

003-0-110



### AREA OF APPLICATION

Routine EEG, research EEG, high resolution EEG

### SET

– Ear electrodes PROFESSIONAL

### DESCRIPTION

Ear electrodes PROFESSIONAL is a set of MCScap-NT electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-AT. MCScap-NT electrode is designed for research requiring increased patient comfort for a long time. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Use with conductive paste is possible. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

MCScap-AT ear fixator is specially designed for attaching MCScap-T/NT/TC cup electrodes to earlobes. The fixator tightly presses the electrode to the ear lobe and does not cause discomfort to the patient..

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.9 mm
Distance from the skin to the electrode conductive surface	1.1 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	150 cm

*Information for reference only*



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Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Material of ear fixator	polyurethane
Weight	15 g

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*Information for reference only (continued)*



## Ear electrodes CLINIC

Set of MCScap-TC electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-AT

### Article

003-0-111



### AREA OF APPLICATION

Routine EEG

### SET

- MCScap-TC electrode - 2 pcs.
- MCScap-AT ear fixator - 2 pcs.

### DESCRIPTION

Ear electrodes CLINIC is a set of MCScap-TC electrodes with TouchProof 1.5 mm (DIN 42 802-ST) connector wire length 150 cm and ear fixators MCScap-AT. The shape of the MCScap-TC electrode provides increased patient comfort during the study for a long time. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

MCScap-AT ear fixator is specially designed for attaching MCScap-T/NT/TC cup electrodes to earlobes. The fixator tightly presses the electrode to the ear lobe and does not cause discomfort to the patient..

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.9 mm
Distance from the skin to the electrode conductive surface	1.1 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ



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Electrode cable length	150 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Material of ear fixator	polyurethane
Weight	15 g

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*Information for reference only*



DATA SHEET

# MCScap-A ear fixator

Set of ear fixators for electrodes MCScap-E, 2 pcs.

**Article**

003-0-112



**SET**

– MCScap-A ear fixator - 2 pcs.

**DESCRIPTION**

MCScap-A ear fixator is specifically designed for point electrodes MCScap-E. The fixator tightly presses the electrode to the ear lobe and does not cause discomfort to the patient..

**TECHNICAL DATA**

Material	polyurethane
Weight	8g

*Information for reference only*



DATA SHEET

# MCScap-AT ear fixator

Set of ear fixators for electrodes MCScap-T/NT/TC, 2 pcs.

**Article**

003-0-113



**SET**

– MCScap-AT ear fixator - 2 pcs.

**DESCRIPTION**

MCScap-AT ear fixator is specially designed for attaching MCScap-T/NT/TC cup electrodes to earlobes. The fixator tightly presses the electrode to the ear lobe and does not cause discomfort to the patient.

**TECHNICAL DATA**

Material	polyurethane
Weight	7g

*Information for reference only*



## MCScap-TC electrode

Cup Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm

### Article

003-0-115



### AREA OF APPLICATION

Routine EEG

### SET

– MCScap-TC electrode

### DESCRIPTION

MCScap-TC electrode is a cup Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm. The shape of the MCScap-TC electrode provides increased patient comfort during the study for a long time. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.9 mm
Distance from the skin to the electrode conductive surface	1.1 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	4 g

*Information for reference only*



# Repair electrode MCScap-C

Cup with skirt Ag/AgCl electrode with crimped end, wire length 190 cm

## Article

003-0-116

## AREA OF APPLICATION

Routine EEG

## SET

– Repair electrode MCScap-C

## DESCRIPTION

Repair electrode MCScap-C is a cup with skirt Ag/AgCl electrode with crimped end to mounting to common connector D-sub. It is designed for replacing electrode at MCScap CLINIC electrode cap.

## TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	10 mm
Surface area of contact of the electrode substance with the skin	78.5 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15 mm
Distance from the skin to the electrode conductive surface	3.5 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	190 cm
Connector type	crimped end
Weight	4 g

*Information for reference only*





# Repair electrode MCScap-T

Thin cup Ag/AgCl sintered electrode with crimped end, wire length 190 cm

## Article

003-0-117

## AREA OF APPLICATION

Routine EEG, sleep EEG, research EEG, high resolution EEG, TMS-EEG

## SET

– Repair electrode MCScap-T

## DESCRIPTION

Repair electrode MCScap-T is a thin cup Ag/AgCl sintered electrode with crimped end to mounting to common connector D-sub. It is designed for replacing electrode at MCScap SLEEP electrode cap.

## TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	7 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	6 mm
Surface area of contact of the electrode substance with the skin	28.3 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.5 mm
Distance from the skin to the electrode conductive surface	1.6 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	190 cm
Connector type	crimped end
Weight	4 g

*Information for reference only*



# Repair electrode MCScap-NTC

Cup with skirt Ag/AgCl sintered electrode with crimped end, wire length 190 cm

## Article

003-0-118

## AREA OF APPLICATION

Routine EEG, research EEG, high resolution EEG

## SET

– Repair electrode MCScap-NTC

## DESCRIPTION

Repair electrode MCScap-NTC is a cup with skirt Ag/AgCl sintered electrode with crimped end to mounting to common connector D-sub. It is designed for replacing electrode at MCScap PROFESSIONAL electrode cap.

## TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	10 mm
Surface area of contact of the electrode substance with the skin	78.5 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	15 mm
Distance from the skin to the electrode conductive surface	3.2 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	190 cm
Connector type	crimped end
Weight	4 g

*Information for reference only*



DATA SHEET

## MCScap-CS22SS electrode black

Stainless steel electrode for transcranial electrostimulation (tDCs / tACS) and EEG recording 22 mm diameter, with TouchProof 1.5 mm connector, wire length 120 cm

Article	color
003-0-119	black



### AREA OF APPLICATION

Transcranial electrical stimulation (TES, tACS), EEG

### SET

- MCScap-CS22SS electrode

### DESCRIPTION

CS22SS is a reusable electrode with a diameter of 22 mm of lowcorrosion stainless steel, designed to conduct transcranial electrical stimulation. The CS22SS electrode, compared to CS22, is much less prone to degradation (corrosion) when used in direct current (tDCS - transcranial direct current stimulation), alternating current with a constant component (monopolar tACS) and micropolarization modes, but does not provide high-quality EEG recording.

When using electrodes in the stimulation mode, the maximum allowable current density values recommended by the scientific or clinical community, which depend on the size and shape of the current, should be taken into account. Examples of calculating the current density for CS22 and CS22SS electrodes for a number of stimulation current values are given in the table.

Stimulation current	Current density
4 mA	1.05 mA/cm <sup>2</sup> (10.5 A/m <sup>2</sup> )
3 mA	0.79 mA/cm <sup>2</sup> (7.9 A/m <sup>2</sup> )
2 mA	0.53 mA/cm <sup>2</sup> (5.3 A/m <sup>2</sup> )
1 mA	0.26 mA/cm <sup>2</sup> (2.6 A/m <sup>2</sup> )
500 μA	0.13 mA/cm <sup>2</sup> (1.3 A/m <sup>2</sup> )

The electrode is an electrically conductive disk with a hole in the center, surrounded by a molded case with an elastic skirt ring, providing a comfortable fit to the skin and an increased contact area.

The CS22 electrodes are designed for installation in MCScap 10-20 and MCScap 10-10 textile caps. The electrodes are fixed on the inside of the cap, and the wires are released through the ventilation holes.

The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector, which fits most EEG amplifiers.

### TECHNICAL DATA

Material of electrode conductive surface	Low Corrosion Stainless Steel AISI 316
Electrode body material	polyurethane



Square of electrode conductive surface	176 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	22 mm
Surface area of contact of the electrode substance with the skin	380 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	26 mm
Distance from the skin to the electrode conductive surface	2.5 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Maximum allowed current through the electrode in the stimulation mode	10 mA
Maximum operating voltage	100 V
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	8 g

Information for reference only



DATA SHEET

## MCScap-CS22SS electrode red

Stainless steel electrode for transcranial electrostimulation (tDCs / tACS) and EEG recording 22 mm diameter, with TouchProof 1.5 mm connector, wire length 120 cm

Article	color
003-0-120	red



### AREA OF APPLICATION

Transcranial electrical stimulation (TES, tACS), EEG

### SET

- MCScap-CS22SS electrode

### DESCRIPTION

CS22SS is a reusable electrode with a diameter of 22 mm of lowcorrosion stainless steel, designed to conduct transcranial electrical stimulation. The CS22SS electrode, compared to CS22, is much less prone to degradation (corrosion) when used in direct current (tDCS - transcranial direct current stimulation), alternating current with a constant component (monopolar tACS) and micropolarization modes, but does not provide high-quality EEG recording.

When using electrodes in the stimulation mode, the maximum allowable current density values recommended by the scientific or clinical community, which depend on the size and shape of the current, should be taken into account. Examples of calculating the current density for CS22 and CS22SS electrodes for a number of stimulation current values are given in the table.

Stimulation current	Current density
4 mA	1.05 mA/cm <sup>2</sup> (10.5 A/m <sup>2</sup> )
3 mA	0.79 mA/cm <sup>2</sup> (7.9 A/m <sup>2</sup> )
2 mA	0.53 mA/cm <sup>2</sup> (5.3 A/m <sup>2</sup> )
1 mA	0.26 mA/cm <sup>2</sup> (2.6 A/m <sup>2</sup> )
500 μA	0.13 mA/cm <sup>2</sup> (1.3 A/m <sup>2</sup> )

The electrode is an electrically conductive disk with a hole in the center, surrounded by a molded case with an elastic skirt ring, providing a comfortable fit to the skin and an increased contact area.

The CS22 electrodes are designed for installation in MCScap 10-20 and MCScap 10-10 textile caps. The electrodes are fixed on the inside of the cap, and the wires are released through the ventilation holes.

The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector, which fits most EEG amplifiers.

### TECHNICAL DATA

Material of electrode conductive surface	Low Corrosion Stainless Steel AISI 316
Electrode body material	polyurethane



Square of electrode conductive surface	176 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	22 mm
Surface area of contact of the electrode substance with the skin	380 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	26 mm
Distance from the skin to the electrode conductive surface	2.5 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Maximum allowed current through the electrode in the stimulation mode	10 mA
Maximum operating voltage	100 V
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120 cm
Connector type	Touch Proof 1.5 mm (DIN 42 802-ST)
Weight	8 g

Information for reference only



## MCScap-StTC electrode

Cup Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm, compatible with silicone tubular cap

### Article

003-0-122



### AREA OF APPLICATION

Routine EEG

### SET

– MCScap-StTC electrode

### DESCRIPTION

MCScap-StTC electrode is a cup Ag/AgCl electrode for EEG recording with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm, compatible with silicone tubular cap. The shape of the MCScap-StTC electrode provides increased patient comfort during the study for a long time. MCScap-StTC electrode has a fixator to mount to silicone tubular cap. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.9 mm
Distance from the skin to the electrode conductive surface	1.1 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120
Connector type	Touch Proof 1.5 mm DIN 42 802-ST
Weight	

*Information for reference only*



## MCScap-StNT electrode

Cup Ag/AgCl sintered electrode with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm, compatible with silicone tubular cap

### Article

003-0-176



### AREA OF APPLICATION

Routine EEG, research EEG, high resolution EEG

### SET

– MCScap-StNT electrode

### DESCRIPTION

MCScap-StNT electrode is a cup Ag/AgCl sintered electrode with TouchProof 1.5 mm (DIN 42 802-ST) connector, wire length 120 cm, compatible with silicone tubular cap. MCScap-StNT electrode is designed for research requiring increased patient comfort for a long time. MCScap-StNT electrode has a fixator to mount to silicone tubular cap. The Ag/AgCl electrode material guarantees minimum polarization and long-term signal stability. MCScap electrodes are made in a plastic case to reduce artifacts during movement. The conductive surface of the MCScap electrodes is not in direct contact with the skin. Contact is provided by a conductive substance. A hole in the electrodes is provided to add a conductive gel. Use with conductive paste is possible. Electrode have additional labeling what makes easy to rearrange them to new textile base. The electrode has TouchProof 1.5 mm (DIN 42 802-ST) connector.

### TECHNICAL DATA

Material of electrode conductive surface	Ag/AgCl sintered
Electrode body material	polyurethane
Square of electrode conductive surface	26 mm <sup>2</sup>
Internal diameter of the electrode at the point of contact of the electrode contact substance with the skin	8 mm
Surface area of contact of the electrode substance with the skin	50.2 mm <sup>2</sup>
Outer diameter of the electrode at the point of contact with the skin	11.9 mm
Distance from the skin to the electrode conductive surface	1.1 mm
The diameter of the hole in the electrode to add gel	2.8 mm
Electrode polarization	≤ 50 mV
Resistance of electrodes insulation	≥ 1000 MΩ
Dielectric strength of electrodes insulation	1500 V
The impedance of the electrode	≤ 5 kΩ
Electrode cable length	120
Connector type	Touch Proof 1.5 mm DIN 42 802-ST
Weight	

*Information for reference only*







# **Section 3**

## **Textile caps**

## MCScap 10-10 black

Printed textile cap, marked according to international system 10-10 with chin belt

Article	Size	Head circumference
003-0-213	XL	60-66 cm
003-0-214	XL/L	57-63 cm
003-0-215	L	54-60 cm
003-0-216	L/M	51-57 cm
003-0-217	M	48-54 cm
003-0-218	M/S	45-51 cm
003-0-219	S	42-48 cm
003-0-220	S/XS	39-45 cm
003-0-221	XS	36-42 cm
003-0-222	Inf I	32-36 cm
003-0-223	Inf II	28-32 cm
003-0-224	Inf III	24-28 cm



### SET

- MCScap textile cap 10-10
- Chin belt

### DESCRIPTION

MCScap 10-10 is a printed textile cap marked according to international system 10-10 with chin belt.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap have size identification by color of seam and are marked according to system 10-10.

### TECHNICAL DATA

Material of the cap	neoprene
Electrode positioning system	10-10
Compatible Electrode Models	MCScap-C/TC/T/NT/NTC/NTH
Weight	40 g

*Information for reference only*



## MCScap 10-20 with fixing rings

Printed textile cap marked according to international system 10-10 with chin belt with 23 preinstalled fixing rings

Article	Size	Head circumference
003-0-225	XL	60-66 cm
003-0-226	XL/L	57-63 cm
003-0-227	L	54-60 cm
003-0-228	L/M	51-57 cm
003-0-229	M	48-54 cm
003-0-230	M/S	45-51 cm
003-0-231	S	42-48 cm
003-0-232	S/XS	39-45 cm
003-0-233	XS	36-42 cm



### SET

- MCScap textile cap 10-20 with fixing rings
- Chin belt

### DESCRIPTION

MCScap 10-20 with fixing rings is a printed textile cap with 23 preinstalled fixing rings for use with EEG electrodes MCScap-E.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap are made of colored material or seams for simplified identification size and are marked according to system 10-10.

### TECHNICAL DATA

Material of the cap	neoprene
Electrode positioning system	10-20
Compatible Electrode Models	MCScap-E
Number of fixing rings	23
Weight	80 g

*Information for reference only*



## MCScap 10-10

Printed textile cap, marked according to international system 10-10 with chin belt

Article	Size	Head circumference
003-0-234	XL	60-66 cm
003-0-235	XL/L	57-63 cm
003-0-236	L	54-60 cm
003-0-237	L/M	51-57 cm
003-0-238	M	48-54 cm
003-0-239	M/S	45-51 cm
003-0-240	S	42-48 cm



### SET

- MCScap textile cap 10-10
- Chin belt

### DESCRIPTION

MCScap 10-10 is a printed textile cap for use with EEG electrodes.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap are made of colored material for simplified identification size and are marked according to system 10-10.

### TECHNICAL DATA

Material of the cap	neoprene
Electrode positioning system	10-10
Compatible Electrode Models	MCScap-C/TC/T/NT/NTC/NTH
Weight	40 g

*Information for reference only*



## MCScap 10-10 with fixing rings

Printed textile cap marked according to international system 10-10 with chin belt with 74 preinstalled fixing rings

Article	Size	Head circumference
003-0-255	XL	60-66 cm
003-0-256	XL/L	57-63 cm
003-0-257	L	54-60 cm
003-0-258	L/M	51-57 cm
003-0-259	M	48-54 cm
003-0-260	M/S	45-51 cm
003-0-261	S	42-48 cm



### SET

- MCScap textile cap 10-10 with fixing rings
- Chin belt

### DESCRIPTION

MCScap 10-10 with fixing rings is a printed textile cap for use with EEG electrodes.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap are made of colored material for simplified identification size and are marked according to system 10-10.

### TECHNICAL DATA

Material of the cap	neoprene
Electrode positioning system	10-10
Compatible Electrode Models	MCScap-E
Number of fixing rings	74
Weight	220 g

*Information for reference only*



DATA SHEET

## MCScap 10-5

Printed textile cap marked according to international system 10-5 with chin belt

Article	Size	Head circumference
003-0-264	L	54-60 cm
003-0-265	L/M	51-57 cm



### SET

- MCScap textile cap 10-5
- Chin belt

### DESCRIPTION

MCScap 10-5 is a printed textile cap is designed for use with MCScap-C/TC/T/NT/NTC/NTH electrodes.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient's skin. The cap is fixed on the head with the chin or chest belt. Textile cap have size identification by color of seam and are marked according to system 10-5.

### TECHNICAL DATA

Material of the cap	neoprene
Electrode positioning system	10-5
Compatible Electrode Models	MCScap-C/TC/T/NT/NTC/NTH
Weight	40 g

*Information for reference only*



DATA SHEET

## Chest belt

Chest belt for fixing textile cap

Article	Size
003-0-266	adult
003-0-267	children
003-0-268	infant



### SET

– Chest belt

### DESCRIPTION

#### DESCRIPTION

Elastic chest belt for fixing MCScap caps with a buckle on the chest and velcro for attaching to the cap.

Size of chest belt	Chest girth	Recommended for use with MCScap sizes
Adult	70-120 cm	XL, XL/L, L, L/M
Children	40-70 cm	M, M/S, S, S/XS
Infant	30-40 cm	XS, Inf I, Inf II, Inf III

### TECHNICAL DATA

Cap mount	velcro
Adjustment	for sizes "Adult", "Children"
Weight	90 g (Adult), 55 g (Children), 15 g (Infant)

*Information for reference only*

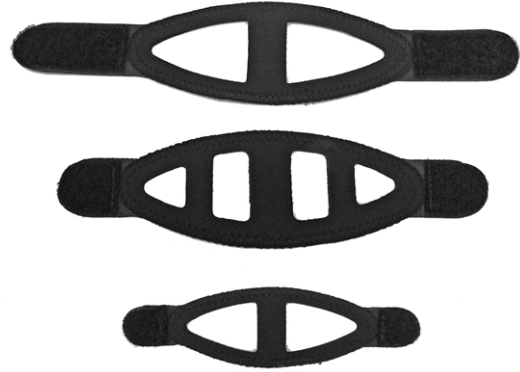


DATA SHEET

## Chin belt

Chin belt for fixing textile cap

Article	Size
003-0-269	adult
003-0-270	children
003-0-271	infant



**SET**  
– Chin belt

**DESCRIPTION**  
Chin belt for fixation for MCScap cap.

Chin belt size	Recommended for use with MCScap sizes
Adult	XL, XL/L, L, L/M
Children	M, M/S, S, S/XS
Infant	XS, Inf I, Inf II, Inf III

**TECHNICAL DATA**

Cap mount	velcro
Material	neoprene
Weight	5 g (Adult), 4 g (Children), 2 g (Infant)

*Information for reference only*



## MCScap Cover

Protective head cover for MCScap electrode caps

Article	Size	Head circumference
003-0-272	XL	60-66 cm
003-0-273	XL/L	57-63 cm
003-0-274	L	54-60 cm
003-0-275	L/M	51-57 cm
003-0-276	M	48-54 cm
003-0-277	M/S	45-51 cm
003-0-278	S	42-48 cm
003-0-279	S/XS	39-45 cm
003-0-280	XS	36-42 cm



### SET

- MCScap Cover

### DESCRIPTION

MCScap Cover is a protective head cover for:

- additional fixation of the MCScap cap
- better fit of the electrodes to the head
- protection of wires with electrodes from external factors.

MCScap cover is suitable for both caps with location of the output of the electrode cable from cap on the back of the head (CLINIC, PROFESSIONAL, ELECTRODE SET), and at the top (SLEEP).

The size range of the MCScap cover is identical to the size range of MCScap textile caps. MCScap cover is recommended to use the same size as the cap. For ELECTRODE SET kits it is recommended to use a half-size larger cap. The Cover has velcro fixators for fixing on the head with the chin or chest belt.

### TECHNICAL DATA

Material of the cap	compression net material
Weight	18 g

*Information for reference only*



DATA SHEET

# MCScap Light

Printed textile cap marked according to international system 10-10 with a sewn elastic

Article	Size	Head circumference
003-0-286	L	54-60 cm
003-0-288	M	48-54 cm



**SET**  
– MCScap Light

**DESCRIPTION**

MCScap Light is a printed textile cap marked according to international system 10-10 with a sewn elastic.

Textile cap is made of elastic material, preserving the shape and size. The cap provides the exact position of the electrodes on the head without additional measurements and adjustments. Large holes are provided for ventilation and access to the electrodes and patient’s skin. The cap is fixed on the head with the chin or chest belt. Textile cap are made of colored material for simplified identification size and are marked according to system 10-10.

**TECHNICAL DATA**

Material of the cap	neoprene
Electrode positioning system	10-10
Compatible Electrode Models	MCScap-C/TC/T/NT/NTC/NTH
Weight	30 g

*Information for reference only*





# **Section 4**

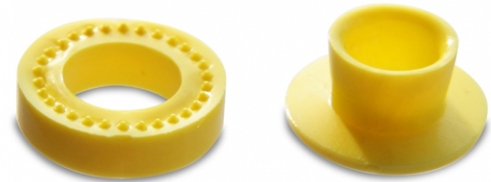
# **Accessories**

DATA SHEET

## Fixing ring

Used for mounting electrodes MCScap-E into the cap

Article	Quantity	Color
003-0-301	5 pcs.	set



### SET

– Set of MCScap fixing ring

### DESCRIPTION

The fixing ring is used to attach the MCScap-E electrodes to the MCScap textile cap. The rings have a collapsible design, which allows, if necessary, replace or install additional rings on the cap.

### TECHNICAL DATA

Amount in a package	5/10/15/23 pcs.
Color	yellow/red/black/white
Material	polyurethane
Weight	30 g



DATA SHEET

## Labels for fixing rings 10-20

Set of labels - 26 pcs.

**Article**

003-0-302



**AREA OF APPLICATION**

**SET**

– Labels for fixing rings 10-20

**DESCRIPTION**

Labels for fixing rings 10-20 is a.

**TECHNICAL DATA**

Weight

*Information for reference only*



DATA SHEET

## Labels for fixing rings 10-10

Set of labels - 74 pcs.

**Article**

003-0-303



**AREA OF APPLICATION**

**SET**

– Labels for fixing rings 10-10

**DESCRIPTION**

Labels for fixing rings 10-10 is a.

**TECHNICAL DATA**

Weight

*Information for reference only*





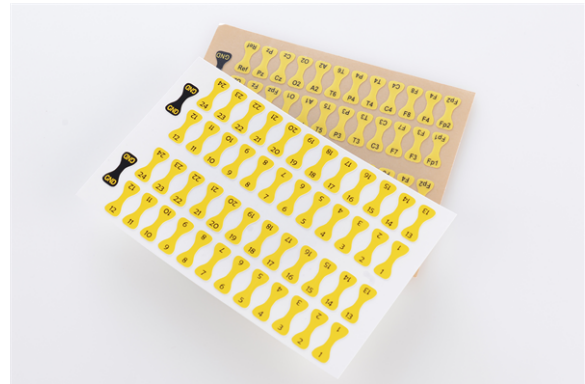
DATA SHEET

# Labels for electrodes 10-20

Set of stickers - 26 pcs.

**Article**

003-0-304



**AREA OF APPLICATION**

**SET**

– Labels for electrodes 10-20

**DESCRIPTION**

Labels for electrodes 10-20 is a.

**TECHNICAL DATA**

Weight

*Information for reference only*



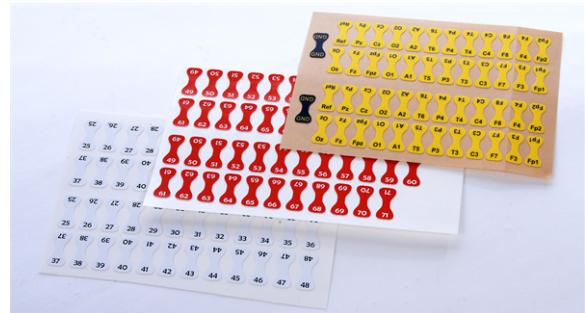
DATA SHEET

# Labels for electrodes 10-10

Set of stickers - 74 pcs.

**Article**

003-0-305



**AREA OF APPLICATION**

**SET**

- Labels for electrodes 10-10

**DESCRIPTION**

Labels for electrodes 10-10 is a.

**TECHNICAL DATA**

Weight

*Information for reference only*

DATA SHEET

# Measuring tape MCScap

Special tape for measuring of head size

**Article**

003-0-306



**AREA OF APPLICATION**

**SET**

– Measuring tape MCScap

**DESCRIPTION**

Measuring tape MCScap is a.

**TECHNICAL DATA**

Weight

*Information for reference only*

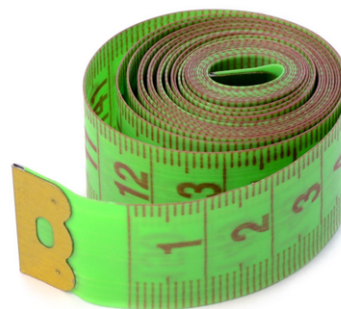


## Measuring tape standard

Standard tape for measuring of head size

### Article

003-0-307



### AREA OF APPLICATION

#### SET

– Measuring tape standard

#### DESCRIPTION

Measuring tape standard is a.

#### TECHNICAL DATA

Weight

*Information for reference only*



# Syringe

20 ml

Article	volume
003-0-308	20 ml



## AREA OF APPLICATION

### SET

– Syringe

### DESCRIPTION

Syringe is a.

### TECHNICAL DATA

Weight

*Information for reference only*



DATA SHEET

# Reusable needle

Reusable blunted needle, 2.0 X 17 mm

Article	length
003-0-310	17 mm



## AREA OF APPLICATION

### SET

– Reusable needle

### DESCRIPTION

Reusable needle is a.

### TECHNICAL DATA

Weight

*Information for reference only*



# Brush

Brush for electrodes cleaning

## Article

003-0-314



## AREA OF APPLICATION

### SET

– Brush

### DESCRIPTION

Brush is a.

### TECHNICAL DATA

Weight

*Information for reference only*



DATA SHEET

## Bag

Bag for storage

**Article**

003-0-315



**AREA OF APPLICATION**

**SET**

– Bag

**DESCRIPTION**

Bag is a.

**TECHNICAL DATA**

Weight

*Information for reference only*





DATA SHEET

## Repair kit for CLINIC

Extractor tool; MCScap-C electrode (2 pcs.); cable ties for electrodes; instruction.

Article	cable length
003-0-317	190 cm



### AREA OF APPLICATION

Routine EEG

### SET

– Repair kit for CLINIC

### DESCRIPTION

Repair kit for CLINIC is a Extractor tool; MCScap-C electrode with custom connector (2 pcs.); cable ties for electrodes; instruction..

### TECHNICAL DATA

Weight

*Information for reference only*



DATA SHEET

## Repair kit for SLEEP

Extractor tool; MCScap-T electrode (2 pcs.); cable ties for electrodes; instruction.

Article	cable length
003-0-318	190 cm



### AREA OF APPLICATION

Routine EEG, sleep EEG, research EEG, high resolution EEG, TMS-EEG

### SET

– Repair kit for SLEEP

### DESCRIPTION

Repair kit for SLEEP is a Extractor tool; MCScap-T electrode with custom connector (2 pcs.); cable ties for electrodes; instruction..

### TECHNICAL DATA

Weight

*Information for reference only*



DATA SHEET

## Repair kit for PROFESSIONAL

Extractor tool; MCScap-NTC electrode (2 pcs.); cable ties for electrodes; instruction.

Article	cable length
003-0-319	190 cm



### AREA OF APPLICATION

Routine EEG, research EEG, high resolution EEG

### SET

– Repair kit for PROFESSIONAL

### DESCRIPTION

Repair kit for PROFESSIONAL is a Extractor tool; MCScap-NTC electrode with custom connector (2 pcs.); cable ties for electrodes; instruction..

### TECHNICAL DATA

Weight

*Information for reference only*



DATA SHEET

# Adapter NVX2cap

Adapter for connecting up to 49 electrodes, including GND with a Touch Proof 1.5 mm connector to an amplifier with a DB-25F or Kel50 connector.

**Article**

003-6-001



**SET**

- Adapter NVX2cap
- 180 cm cable for connecting to amplifiers with a DB-25F connector
- 30 cm flat cable for connection to amplifiers with a KEL50 connector

**DESCRIPTION**

NVX2CAP is a passive adapter (switch) for connecting EEG electrodes with a Touch Proof 1.5 mm (DIN 42 802-ST) connector to EEG amplifiers.

NVX2CAP can be used in cases when it is necessary to quickly disconnect or connect patient-mounted electrodes to an EEG amplifier, for example, when registering a somnogram, or when it is necessary to increase the distance from the patient to the amplifier.

Marking of leads on the adapter is according to the system 10-10.

**ATTENTION!**

Increasing the distance from the electrodes to the amplifier generally increases the level of interference from external sources (pickup) on the signal.

1.8 m connecting cables used in NVX2CAP have their own inter-wire capacitance up to 200 pF. For example, with an interelectrode resistance of 10 kΩ, the signal will additionally be attenuated by no more than 0.2% at a frequency of 150 Hz, but at a frequency of 80 kHz the attenuation will be already 30%.

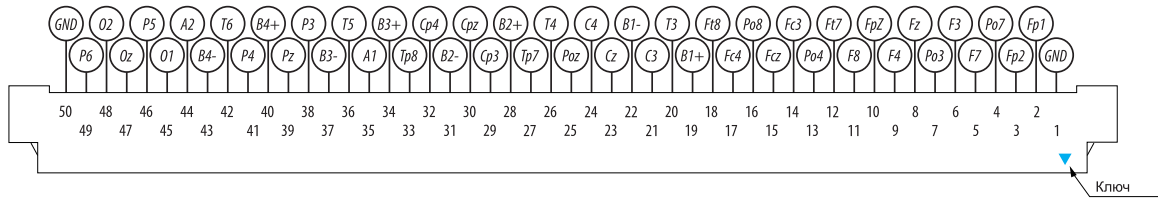
**TECHNICAL DATA**

Connector 1	49 Touch Proof 1.5 mm DIN 42 802-BU
Connector 2	DB25M or Kel50(8830E-050-170 (KEL Corp.))
Maximum number of electrodes	49
Length of cable with DB-25M connector	180 cm
Length of cable with KEL50 connector	30 cm
Weight	500 g

*Information for reference only*

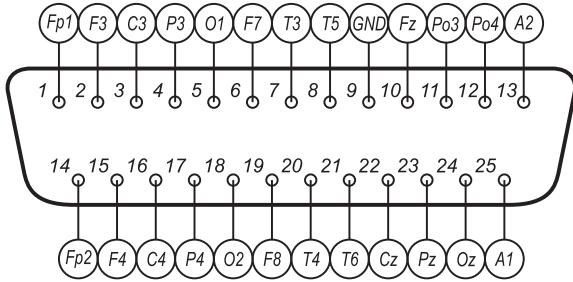
**MAIN PIN LAYOUTS OF COMMON CONNECTOR**

Connector 8830E-050-170 (KEL Corp.):



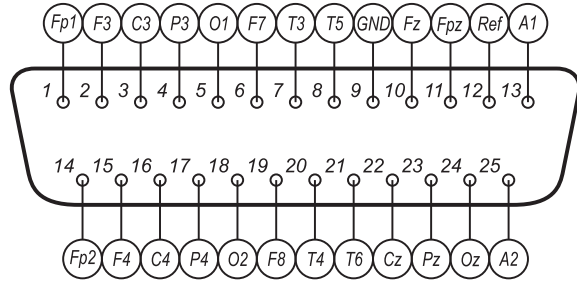
Connector DB-25 (see model number on a back side):

Model 1



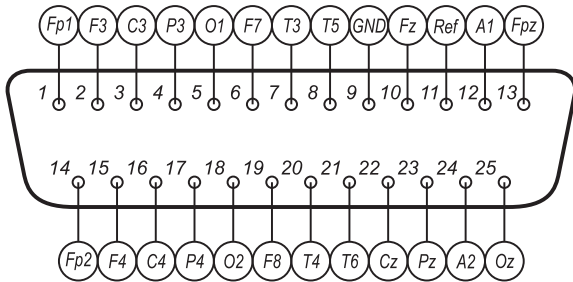
Manufacturer's code DB25M\_R11-01M25

Model 2



Manufacturer's code DB25M\_R15-03M25

Model 3



Manufacturer's code DB25M\_R15-02M25

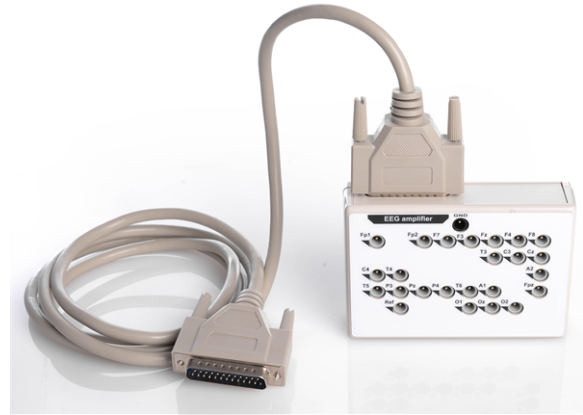
DATA SHEET

# Adapter NVX2Cap-24

Adapter for connecting up to 25 electrodes, including GND with a Touch Proof 1.5 mm connector to an amplifier with a DB-25F.

**Article**

003-6-002



**SET**

- Adapter NVX2Cap-24
- 180 cm cable for connecting to amplifiers with a DB-25F connector

**DESCRIPTION**

NVX2CAP-24 is a passive adapter (switch) for connecting EEG electrodes with a Touch Proof 1.5 mm (DIN 42 802-ST) connector to EEG amplifiers.

NVX2CAP24 can be used in cases when it is necessary to quickly disconnect or connect patient-mounted electrodes to an EEG amplifier, for example, when registering a somnogram, or when it is necessary to increase the distance from the patient to the amplifier.

Marking of leads on the adapter according to the system 10-10.

**ATTENTION!**

Increasing the distance from the electrodes to the amplifier generally increases the level of interference from external sources (pickup) on the signal.

1.8 m connecting cables used in NVX2CAP have their own inter-wire capacitance up to 200 pF. For example, with an interelectrode resistance of 10 kΩ, the signal will additionally be attenuated by no more than 0.2% at a frequency of 150 Hz, but at a frequency of 80 kHz the attenuation will be already 30%.

**TECHNICAL DATA**

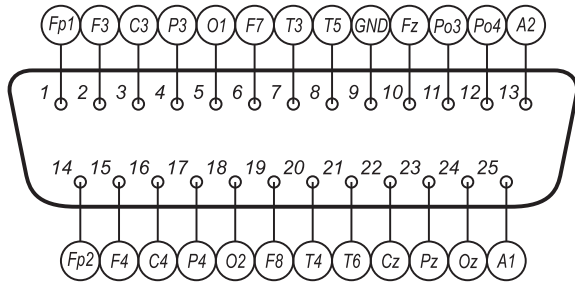
Connector 1	25 Touch Proof 1.5 mm DIN 42 802-BU
Connector 2	DB25M
Maximum number of electrodes	25
Length of cable	180 cm
Weight	500 g

*Information for reference only*

**MAIN PIN LAYOUTS OF COMMON CONNECTOR**

Connector DB-25 (see model number on a back side):

Model 1



Manufacturer's code DB25M\_R11-01M25



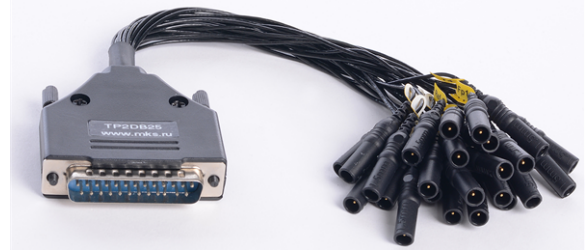
DATA SHEET

## Adapter TP2DB25

Passive adapter with 25 TouchProof 1.5 mm (DIN 42 802-BU) connectors at the one side and DB-25M connector at the other side for connecting up to 25 electrodes to EEG amplifiers

**Article**

003-6-003



**DESCRIPTION**

Adapter TP2DB25 is a passive adapter (switch) for connecting electrophysiological electrodes with individual connectors Touch Proof 1.5 mm (DIN 42 802-ST) to bioelectric amplifiers with a common DB-25F connector.

TP2DB25 electrode adapter can be used in cases when it is necessary to quickly disconnect or connect patient-mounted electrodes to an EEG amplifier, for example, when registering a somnogram.

20 adapter connectors are labeled in accordance with the international system 10-20 and are designed to connect standard lead electrodes. Connectors 11, 12, 13, 24, 25 can be used for arbitrary connection of additional electrodes.

**TECHNICAL DATA**

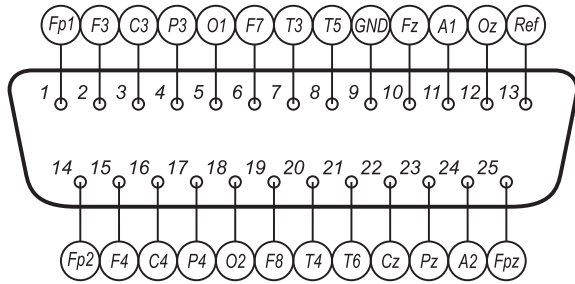
Connector 1	25 Touch Proof 1.5 mm (DIN 42 802-BU)
Connector 2	DB-25M
Maximum number of electrodes	25
Length of cable	20 cm
Weight	80 g

*Information for reference only*

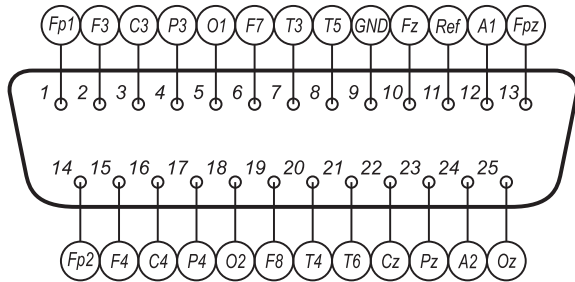




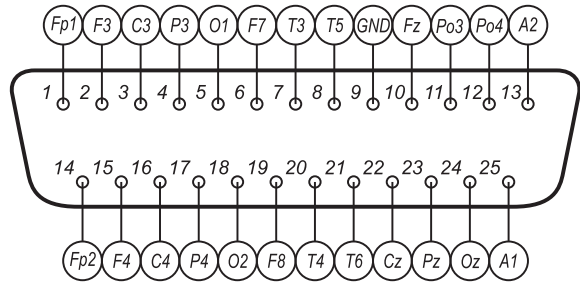
**MAIN PIN LAYOUTS OF COMMON CONNECTOR**



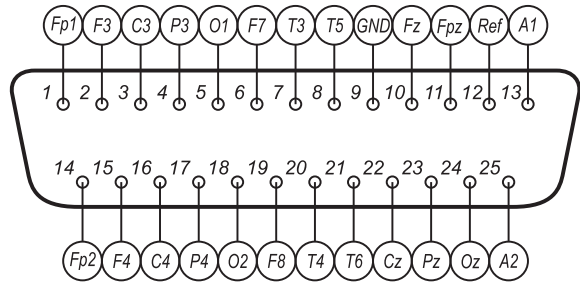
*Manufacturer's code DB25M\_R15-01M25*



*Manufacturer's code DB25M\_R15-02M25*



*Manufacturer's code DB25M\_R11-01M25*



*Manufacturer's code DB25M\_R15-03M25*

For information about other possible pin layouts, contact the manufacturer

DATA SHEET

## Adapter TP2DB25F

Passive adapter with 25 TouchProof 1.5 mm (DIN 42 802-ST) connectors at the one side and DB-25F connector at the other side for connecting up to 25 electrodes to EEG amplifiers

**Article**

003-6-004



**SET**

– Adapter TP2DB25F

**DESCRIPTION**

Adapter TP2DB25F is a passive adapter (switch) for connecting an EEG cap with a common DB-25M connector to the connectors of Touch Proof 1.5 mm (DIN 42 802-BU) of EEG amplifier.

**TECHNICAL DATA**

Connector 1	up to 25 Touch Proof 1.5 mm (DIN 42 802-ST)
Connector 2	DB-25F
Maximum number of electrodes	25
Length of cable	30 cm
Weight	90 g

*Information for reference only*



DATA SHEET

# EEG starter kit

Kit to start working with the EEG cap

**Article**

**003-7-001**



**SET**

– EEG starter kit

**DESCRIPTION**

EEG starter kit includes everything you need to start working with an EEG cap: contact electrode gel with high electrical conductivity, syringe, disposable needles for filling electrodes with gel through a special hole in the case of electrode, brushes for cleaning electrodes and spray for quick disinfection of electrodes and caps and accessories.

**TECHNICAL DATA**

Gel conductivity	3,0 - 4,0 S/m
Gel viscosity	9.0-11.0 Pa × s (shear rate 16.8±0.3 s <sup>-1</sup> ); 17.0-21.0 Pa × s (shear rate 7.5±0.05 s <sup>-1</sup> )
Gel pH	6.0 - 7.0
Weight of gel	250 g
Syringe volume	25 ml
Needle length	15 mm
Needle diameter	2 mm
Volume of spray for disinfection	75 g
Weight of EEG starter kit	410 g

*Information for reference only*

# Unigel

Conductive gel for EEG, 250 gr

## Article

## SET

– Unigel

## DESCRIPTION

Unigel is a Conductive gel for EEG, 250 gr.

## TECHNICAL DATA

Weight

*Information for reference only*



DATA SHEET

# EEG gel Unimax

Electrode contact gel with high electrical conductivity, 250 gr

**Article**

**003-7-003**



**SET**

– EEG gel Unimax

**DESCRIPTION**

Contact electrode gel with high electrical conductivity is used for ECG, defibrillation, EEG, REG, EMG, registration of evoked potentials (EP). Recommended for EEG using caps.

**TECHNICAL DATA**

Gel conductivity	3,0 - 4,0 S/m
Gel viscosity	9.0-11.0 Pa × s (shear rate 16.8±0.3 s <sup>-1</sup> ); 17.0-21.0 Pa × s (shear rate 7.5±0.05 s <sup>-1</sup> )
pH	6.0 - 7.0
Weight of gel	250 g
Manufacturer	Geltek, Russia
Weight	280 g

*Information for reference only*



## EEG paste Unipaste

Electrode contact paste, highly conductive, adhesive, 120 gr

**Article**

003-7-004



**SET**

– EEG paste Unipaste

**DESCRIPTION**

Highly conducting, adhesive paste is used as a fixing and electrically conductive contact medium when installing electrodes on the surface of the head and body when performing the following electrophysiological studies: electroencephalography (EEG), evoked potentials (EP) of the brain, transcranial magnetic stimulation (TMS), electromyography (EMG) and determining the speed of the nerves, polysomnography, conducting biofeedback (BF) EEG and EMG, etc.

Unipaste is used both for normal EEG and EP studies (up to one hour), and for long-term monitoring studies and polysomnography (up to a day).

Unipaste provides a reliable fixation of the electrodes, has high conductive properties, reduces the electrical resistance of the skin, does not damage the electrodes, and is easily washed off with warm water.

**TECHNICAL DATA**

Conductivity	0.3 - 1.5 S/m
Impedance	1–2 kΩ
Adhesion	not less than 4.5 N/ cm <sup>2</sup> (at density application paste 0.16 g/cm <sup>2</sup> )
Manufacturer	Geltek, Russia
Weight of paste	120 g
Weight	155 g

*Information for reference only*



DATA SHEET

# Mannequin

Mat white head mannequin for the demonstration of electrode cap

Article	type
003-7-008	male bust
003-7-009	female bust
003-7-010	male head
003-7-011	female head



**SET**

– Mannequin

**DESCRIPTION**

Mat white head mannequin for the demonstration of electrode cap.

**TECHNICAL DATA**

Material	fiberglass
Color	white
Weight	male bust - 1.6 kg, female bust - 1.3 kg, head - 0.6 kg.

*Information for reference only*



DATA SHEET

# Uniscrub

Conductive abrasive gel for skin preparation, 160 g.

**Article**

**003-7-015**



**SET**

– Uniscrub

**DESCRIPTION**

Uniscrub is a conductive abrasive gel for pretreatment of the skin during the following electrophysiological studies: EEG, EP, EMG recordings, ECG stress tests.

Treatment of the skin with Uniscrub gel before installing electrodes of various types makes it possible to improve the signal quality by degreasing the skin and reducing its electrical resistance.

**TECHNICAL DATA**

Conductivity	0.10 - 0.4 S/m
pH	5.0 - 7.0
Viscosity	15.0 - 31.0 Pa • s (Brookfield RVD VII + Pro/SC4-29/30 rpm shear rate 7.5 ± 0.1 s <sup>-1</sup> , at 23 °C).
Color	bluish gray
Manufacturer	Geltek, Russia
Weight of gel	160 g
Weight	185 g

*Information for reference only*

