# EEG

### THIS SECTION IS ABOUT THE ELECTRODES USED FOR EEG MONITORING AND EVOKED POTENTIALS RECORDING

Pre-assembled EEG head caps with internal wires Pre-assembled EEG head caps with external wires Pre-assembled EEG head caps with thin wires Pre-assembled EEG head caps for premature babies Pre-assembled EEG head caps for MRI and TMS Interface cables for pre-assembled EEG head caps Emergency cable for EEG head caps Pre-assembled EEG head caps with 32/41 electrodes Pre-assembled EEG head caps for evoked potentials recording Respiration sensor Tubular elastic EEG head caps Bridge electrodes for tubular elastic EEG head caps Ear electrodes Connection cables for bridge electrodes Kit: 21 marked alligator clip cables Conductive electrode gel Blunt needles Neurology accessories

# **INTRODUCTORY REMARKS** PRE-ASSEMBLED EEG HEAD CAPS

These EEG head caps are made of stretch fabric. The electrodes are permanently positioned following the INTERNATIONAL 10-20 system.

The electrodes are made of Ag/AgCl. When the head cap has been put on the patient, the electrodes must be filled with conductive gel. This gel has to be injected into every electrode's hole using a syringe with blunt needle.

The extra-flexible and mechanically strong TINSEL wires (standard length: 900mm) come out of the head cap. Their end connects them to a 25 pin male D-Sub connector, which makes disconnection quicker.

The interface cable (standard length: 400 mm) must be plugged into the head cap connector. On the other end of the interface cable there are 21 marked cables (**universal connection**) which are plugged into the EEG box. The final connector is a  $\emptyset$  1.5 mm touchproof DIN42802. Both the EEG box and the 21 cables are marked following the INTERNATIONAL 10-20 system.

The EEG head caps are available in many different adult and child sizes. The head cap's size is clearly distinguishable by its colour.

The position of the electrodes Fp1 and Fp2 is marked on the head cap for easy identification of the frontal section.



The head caps come complete with a fastener which is made up of a soft chin strap and an adjustable Velcro strap.

Other types of fasteners (such as body harnesses and several types of chin straps) are sold separately (see pages 95-96).

The head caps with "S" wiring must be connected with the interface cable CUEFD1S, otherwise the electric connection won't work.

The head caps with direct connection to the EEG box do not need any interface cable. In that case, the head cap's wires are 1300 mm long and the plug has to be put directly into the EEG box of the desired manufacturer (for instance, the head cap CUET52M must be put into a MICROMED EEG box).

Head caps with customized layouts for evoked potentials recording or any other use can be manufactured upon request.

AVAILABLE MODELS:

The EEG head caps come complete with soft rubber electrodes which are available in two different thicknesses:

1) standard thickness

2) reduced thickness, which is particularly suitable for polysomnography (PSG).

The head cap's wires may be arranged in two different ways:

1) the wires may be located internally: the head cap will be more compact; or

2) the wires may be located externally: the head cap will cling to the patient.

These four different models make it possible for the customer to choose the pre-assembled head cap which best suits their needs.



## PRE-ASSEMBLED EEG HEAD CAPS WITH STANDARD-THICKNESS ELECTRODES AND WIRES LOCATED INTERNALLY REUSABLE

Packaging: box containing 1 piece.								
CODE	WIRES	SIZE	Number of electrodes	DESCRIPTION	COLOUK			
CUEF60S	internal	58-62 cm	21, standard thickness	Extra large, adult	Blue			
CUEF56S	internal	54-58 cm	21, standard thickness	Large, adult	Red			
CUEF52S	internal	50-54 cm	21, standard thickness	Medium-small, adult	Yellow			
CUEF485	internal	46-50 cm	21, standard thickness	Large, child	Green			
CUEF44S	internal	42-46 cm	21, standard thickness	Medium, child	L.Blue			
CUEF41S	internal	38-42 cm	21, standard thickness	Small, child	Pink			
CUEF38 <mark>S</mark>	internal	34-38 cm	11, standard thickness	Large, neonatal	Brown			
CUEF345	internal	32-34 cm	11, standard thickness	Medium, neonatal	Orange			
CUEF32S	internal	30-32 cm	11, standard thickness	Small, neonatal	White			



#### CUSTOMIZED CONNECTION CABLES ARE AVAILABLE UPON REQUEST.

Α	INTERNATIONAL	N	NEUROSOFT
Μ	MICROMED	XX	CUSTOM-MADE

## PRE-ASSEMBLED EEG HEAD CAPS WITH REDUCED-THICKNESS ELECTRODES AND WIRES LOCATED INTERNALLY REUSABLE

CODE	WIRES	SIZE	Number of electrodes	DESCRIPTION	COLOUI
CUER60S	internal	58-62 cm	21, reduced thickness	Extra large, adult	Blue
CUER56S	internal	54-58 cm	21, reduced thickness	Large, adult	Red
CUER52S	internal	50-54 cm	21, reduced thickness	Medium-small, adult	Yellow
CUER485	internal	46-50 cm	21, reduced thickness	Large, child	Green
CUER44S	internal	42-46 cm	21, reduced thickness	Medium, child	L. Blue
CUER41S	internal	38-42 cm	21, reduced thickness	Small, child	Pink
CUER38 <mark>S</mark>	internal	34-38 cm	11, reduced thickness	Large, neonatal	Brown
CUER345	internal	32-34 cm	11, reduced thickness	Medium, neonatal	Orange
CUER32S	internal	30-32 cm	11, reduced thickness	Small, neonatal	White



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Α	INTERNATIONAL	N	NEUROSOFT
Μ	MICROMED	XX	CUSTOM-MADE

## PRE-ASSEMBLED EEG HEAD CAPS WITH STANDARD-THICKNESS ELECTRODES AND WIRES LOCATED EXTERNALLY REUSABLE

CODE	WIRES	SIZE	Number of electrodes	DESCRIPTION	COLOUK
CUEE60S	external	58-62 cm	21, standard thickness	Extra large, adult	Blue
CUEE56S	external	54-58 cm	21, standard thickness	Large, adult	Red
CUEE52S	external	50-54 cm	21, standard thickness	Medium-small, adult	Yellow
CUEE48S	external	46-50 cm	21, standard thickness	Large, child	Green
CUEE445	external	42-46 cm	21, standard thickness	Medium, child	L, Blue
CUEE418	external	38-42 cm	21, standard thickness	Small, child	Pink
CUEE38 <mark>5</mark>	external	34-38 cm	11, standard thickness	Large, neonatal	Brown
CUEE34S	external	32-34 cm	11, standard thickness	Medium, neonatal	Orange
CUEE32S	external	30-32 cm	11, standard thickness	Small, neonatal	White



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Α	INTERNATIONAL	N	NEUROSOFT
Μ	MICROMED	XX	CUSTOM-MADE

## PRE-ASSEMBLED EEG HEAD CAPS WITH REDUCED-THICKNESS ELECTRODES AND WIRES LOCATED EXTERNALLY REUSABLE

Packaging:	Packaging: box containing 1 piece.								
CODE	WIRES	SIZE	Number of electrodes	DESCRIPTION	COLOU	UR			
CUET60 <mark>S</mark>	external	58-62 cm	21, reduced thickness	Extra large, adult	Blue				
CUET56 <mark>S</mark>	external	54-58 cm	21, reduced thickness	Large, adult	Red				
CUET52 <mark>S</mark>	external	50-54 cm	21, reduced thickness	Medium-small, adult	Yellow				
CUET48 <mark>S</mark>	external	46-50 cm	21, reduced thickness	Large, child	Green				
CUET44 <mark>S</mark>	external	42-46 cm	21, reduced thickness	Medium, child	L.Blue				
CUET41 <mark>S</mark>	external	38-42 cm	21, reduced thickness	Small, child	Pink				
CUET38 <mark>S</mark>	external	34-38 cm	11, reduced thickness	Large, neonatal	Brown				
CUET34 <mark>S</mark>	external	32-34 cm	11, reduced thickness	Medium, neonatal	Orange				
CUET32 <mark>S</mark>	external	30-32 cm	11, reduced thickness	Small, neonatal	White				



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Α	INTERNATIONAL	N	NEUROSOFT
Μ	MICROMED	XX	CUSTOM-MADE

# PRE-ASSEMBLED EEG HEAD CAPS WITH REDUCED-THICKNESS ELECTRODES AND EXTERNAL, *THIN*, LIGHT BLUE WIRES REUSABLE

CODE	WIRES	SIZE	Number of electrodes	DESCRIPTION	COLOUR
CUEL60S	external	58-62 cm	21, reduced thickness	Extra large, adult	Blue
CUEL56S	external	54-58 cm	21, reduced thickness	Large, adult	Red
CUEL525	external	50-54 cm	21, reduced thickness	Medium-small, adult	Yellow
CUEL48S	external	46-50 cm	21, reduced thickness	Large, child	Green
CUEL44S	external	42-46 cm	21, reduced thickness	Medium, child	LBlue
CUEL418	external	38-42 cm	21, reduced thickness	Small, child	Pink
CUEL38 <mark>5</mark>	external	34-38 cm	11, reduced thickness	Large, neonatal	Brown
CUEL345	external	32-34 cm	11, reduced thickness	Medium, neonatal	Orange
CUEL32S	external	30-32 cm	11, reduced thickness	Small, neonatal	White



#### CUSTOMIZED CONNECTION CABLES ARE AVAILABLE UPON REQUEST.

Α	INTERNATIONAL	Ν	NEUROSOFT
Μ	MICROMED	XX	CUSTOM-MADE

# PRE-ASSEMBLED EEG HEAD CAPS FOR PREMATURE BABIES WITH REDUCED-THICKNESS ELECTRODES AND EXTERNAL, *THIN*, LIGHT BLUE WIRES REUSABLE

Packaging:	box contaiı	ning 1 piece.				
CODE	WIRES	SIZE	Number of electrodes	DESCRIPTION	COLO	UR
CUEL30 <mark>S</mark>	external	29-31 cm	11, reduced thickness	Large, premature	White	
CUEL28 <mark>S</mark>	external	27-29 ст	11, reduced thickness	Medium, premature	White	
CUEL26 <mark>S</mark>	external	25-27 ст	11, reduced thickness	Small, premature	White	



#### CUSTOMIZED CONNECTION CABLES ARE AVAILABLE UPON REQUEST.

Α	INTERNATIONAL	N	NEUROSOFT
Μ	MICROMED	XX	CUSTOM-MADE

# PRE-ASSEMBLED EEG HEAD CAPS FOR MRI AND TMS REUSABLE

This EEG head cap features electrodes with a peculiar shape and 4-metre-long non-magnetic wires. Suitable for recording in environments with high magnetic flux densities.

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CODE	WIRES	SIZE	Number of electrodes	DESCRIPTION	COLO	UR	
CURM60S	external	58-62 cm	21, reduced thickness	Extra large, adult	Blue		
CURM56S	external	54-58 cm	21, reduced thickness	Large, adult	Red		
CURM52 <mark>S</mark>	external	50-54 cm	21, reduced thickness	Medium-small, adult	Yellow		
CURM48 <mark>S</mark>	external	46-50 cm	21, reduced thickness	Large, child	Green		
CURM44S	external	42-46 cm	21, reduced thickness	Medium, child	L.Blue		
CURM41S	external	38-42 cm	21, reduced thickness	Small, child	Pink		
CURM38 <mark>S</mark>	external	34-38 cm	11, reduced thickness	Large, neonatal	Brown		
CURM34S	external	32-34 cm	11, reduced thickness	Medium, neonatal	Orange		
CURM32S	external	30-32 cm	11, reduced thickness	Small, neonatal	White		





CUSTOMIZED CONNECTION CABLES ARE AVAILABLE UPON REQUEST.

# INTERFACE CABLE FOR PRE-ASSEMBLED EEG HEAD CAPS REUSABLE

This INTERFACE CABLE (standard length 400 mm) plugs the EEG head cap into the EEG box.

At the end of the interface cable there are 21 marked cables (**universal connection**) which are plugged into the EEG box. The final connector is a touchproof Ø 1.5 mm DIN42802. The cables are marked following the INTERNATIONAL 10-20 system.

#### Packaging: box containing 1 piece.

CODE	NUMBER OF ELECTRODES	HEAD CAP END	EEG BOX END
CUEFD1RS	11	SEI (S) sub-D25 female	touchproof DIN42802
CUEFD1S	21	SEI (S) sub-D25 female	touchproof DIN42802
CUEFD1A	21	INTERNATIONAL (A)	touchproof DIN42802
CUEFMCS	21	SEI (S) sub-D25 female	MICROMED sub-D25 male
CUEFMZS	21	SEI (S) sub-D25 female	MDR50
CUEFLIS	21	SEI (S) sub-D25 female	MDR36



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