

ELDRY SERIES – REUSABLE SOFT DRY ELECTRODES



Usage Descriptions - ELDRY Series multi-use soft dry electrodes:

ELDRY-SP-MED: Soft dry electrode with medium-length brush legs

ELDRY-SP-LONG: Soft dry electrode with longer-length brush legs

ELDRY-SP-FLEX: Soft dry electrode with shorter, flexible brush legs

ELDRY-SP-FLAT: Soft dry electrode with flat, disc-shaped design

ELDRY-SP-DOME: Soft dry electrode with convex, disc-shaped design

ELDRY-SP-EAR: Soft dry electrode that fits comfortably in research participants ear canal

ELDRY-SP-KIT: Soft dry electrode sample kit

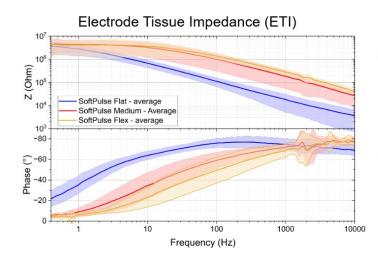
The ELDRY Series of SoftPulse® electrodes relies on highly electrically conductive rubber compounds and silver-based coating. Electrodes are available for dry, comfortable monitoring of EEG, ECG, EMG, and EOG signals.

ELDRY Series electrodes provide optimal biosignal acquisition for various wearable devices and applications, including health, sport, lifestyle, industry, and gaming.

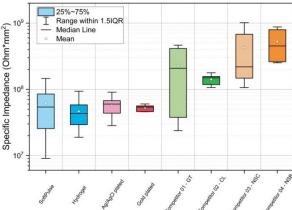
All ELDRY Series electrodes share the following features:

- Ag/AgCl coated tips/surface
- No gel required for signal acquisition
 - o Can also be used with electrode gel
- Latex-free elastomer based
- Specific resistivity $< 20 \ \Omega \cdot \text{cm}$
- 80 shore A

- Electrode tissue Impedance (ETI) at 10 Hz between 25 and 300 kOhm
- Electrodes are tested according to ISO 10993-5/10
- Customized designs possible



SoftPulse Specific Impedance Comparison



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PART	Electrode Description
ELDRY-SP-MED Dry electrode with medium legs	Our reusable soft dry electrode with snap fit stud is perfect for EEG applications. Medium brush legs allow hair penetration for optimal skin contact in hairy regions. Medium is suggested for low-medium hair density and for straight hair styles. The electrode will work with any of BIOPAC's snap fit electrode leads.
	Key design specifications:
	Brush design
	• 15 legs - 5 mm L, 1 mm Ø
	• 9.5 mm total height
	13 mm outer diameter
	• 11,8 mm2 contact area
	ECG standard snap
ELDRY-SP-LONG Dry electrode with long legs	BIOPAC's reusable soft dry electrode with snap fit stud is ideal for EEG applications. Long brush legs are ideal for hairy regions with high hair density and curly hair style; in headsets, the longer legs allow more space between scalp and hardware housing. The electrode will work with any of BIOPAC's snap fit electrode leads.
	Key design specifications:
	Brush design
	• 12 legs - 8 mm L, 1.5 mm Ø
	• 13.5 mm total height
	• 13 mm outer diameter
	• 21,2 mm2 contact area
	ECG standard snap
ELDRY-SP-FLEX Dry electrode with flexible legs	Our reusable soft dry electrode with snap fit stud is designed for EEG applications and recording from other hairy parts of the body. The brush Flex style is designed for hair penetration and improved comfort. In hairy regions, the flexible brush legs easily penetrate hair and the oriented radial displacement improves contact with the skin. This electrode works with any of BIOPAC's snap fit electrode leads.
	Key design specifications:
	Brush design
	• 8 legs - 6.5 mm L
	• 9.5 mm total height
	• 13 mm outer diameter
	• 6.8 mm ² contact area
	ECG standard snap

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PART	Electrode Description
ELDRY-SP-FLAT Flat dry electrode	This reusable flat soft dry electrode with a snap fit stud is ideal for recording biopotential signals such as ECG from non-hairy regions. The flat design allows seamless integration with flat hardware with no pressure marks. The electrode will work with any of BIOPAC's snap fit electrode leads.
	Key design specifications:
	• Flat design
	• 4.7 mm total height
	• 13 mm outer diameter
	• 132,7 mm ² contact area
	ECG standard snap
ELDRY-SP-DOME Convex disc dry electrode	This reusable soft dry electrode with snap fit stud is designed for recording of biopotential signals from non-hairy regions of the body. Dome shape allows for extra pressure on the skin for better contact and lower motion
	artifacts. Dome electrodes are ideal for slightly concave surfaces (e.g., wrist region). The electrode will work with any of BIOPAC's snap fit electrode leads.
	Key design specifications:
	Dome design
	Curvature 1.5 mm
	• 6.5 mm total height
	• 13 mm outer diameter
	• 143,1 mm ² contact area
	ECG standard snap
ELDRY-SP-EAR	This reusable soft dry electrode is ideal for in-ear applications or design and prototyping. The shape
Dry electrode for ear canal	perfectly fits the ear canal morphology for optimal contact, and the thin sidewalls of this SoftPulse® electrode allow easy deformation and improved comfort.
	Key design specifications:
	Earbud design
	• 10 mm total height
	• 12 mm outer diameter
	• 362,4 mm ² contact area
	Round connection, 3.1 mm internal diameter

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PART	Electrode Description
ELDRY-SP-KIT	This sample kit can be used to develop and test a variety of solutions to move from an innovative idea to serial or mass production.
Soft dry electrode sample kit	The sample kit includes:
	• 5x SoftPulse Flat electrodes
	5x SoftPulse Dome electrodes
	5x SoftPulse Brush Medium electrodes
	5x SoftPulse Brush Long electrodes
	5x SoftPulse Flex electrodes
	• 5x SoftPulse In-ear electrodes
	• 2x Coated sheets 4×4 cm – 0.5 mm
	• 2x Coated sheets 4×4 cm – 1.0 mm
	• 2x Coated sheets 4×4 cm – 2.0 mm

Cleaning ELDRY Series Electrodes

The following best practices are recommended to maintain ELDRY electrode performance:

- **Wiping**: Use soft, non-abrasive materials dampened with a mild solvent; limit pressure on the electrode's coating.
- **Immersion**: Water-based solutions are safest for immersion; use organic solvents sparingly and avoid prolonged exposure.
- **Brushing**: Use a soft brush with minimal solvent and pressure.
- **Disinfection**: Use ProDent Clean for safe disinfection; prefer water-based conductive gels if abrasion stability is critical.