LEADING INNOVATOR OF ECG ELECTRODES



Ambu

AMBU ELECTRODES

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AMBU ELECTRODES

17 22 Pediatric/Neonatal **Short-term Monitoring Monitoring** BlueSensor M BlueSensor BR BlueSensor Q WhiteSensor 4500M BlueSensor BRS WhiteSensor 4500M-H 23 BlueSensor NF BlueSensor N WhiteSensor 4841P WhiteSensor 7841P WhiteSensor WSP30 20 21 WhiteSensor WS WhiteSensor WS/RT WhiteSensor 4831Q 21 26 Accessories Skin Fix 28 **Ambu Profile**

BlueSensor PORTFOLIO

Application	Patient population	Electrode	Image	Size (in mm)	Gel type	Backing Material	Connector
	Adult	L		68 x 55	Wet	Microporous	Stud
Long-term, Holter, Event	Adult	VL		72 x 68	Wet	Microporous	Stud
	Adult	VLC		72 x 68	Wet	Microporous	Stud
	Adult	R		57 x 48	Wet	Foam	Stud
Stress, Short-term	Adult	Т		57 x 35	Wet	Foam	Stud
	Adult	SP		42 x 38	Wet	Foam	Stud
	Adult	Q		53 x 40	Wet	Polymer	Stud
el	Adult	М		40 x 34	Wet	Polymer	Stud, A and F
Short-term	Pediatric	N		Wired: 30 x 22	Wet	Foam	Stud, A Wired: A and F
	Pediatric	Р		40 x 34	Wet	Foam	Stud, A and F
Destina	Adult	BS2300		34 x 23	Solid	Polymer	Tab
Resting	Adult	SU	1	49 x 33	Wet	Polymer	Tab A
	Neonates	BR		28 x 20	Solid	Cloth	К
Neonatal	Neonates	BRS		16 x 19	Solid	Cloth	К
	Neonates	NF		Wired: 30 x 22	Solid	Cloth	Stud Wired: K

Connectors and fittings









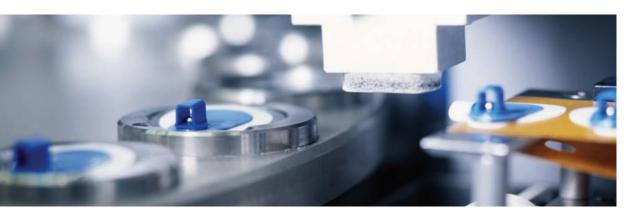




WhiteSensor PORTFOLIO

Application	Patient population	Electrode	Image	Size (in mm)	Gel type	Backing Material	Connector
Long-term	Adult	CMM/1		50 x 50	Solid	Cloth	Stud
Long term	Adult	4440		55 x 55	Wet	Cloth	Graphite Stud
Resting,	Pediatric	WSP25	0	32x25	Solid	Foam	Stud
Long-term	Adult/Pediatric	WSP30	0	35 x 30	Solid	Foam	Stud
	Adult	7841P	•	42 x 42	Solid	Polymer	Graphite Stud
	Adult	WS		36 x 40	Solid	Foam	Stud
	Adult	WS/RT		36 x 40	Solid	Foam	Graphite Stud
	Adult	4500M		50 x 50	Wet	Foam	Graphite Stud
Short -term	Adult	4500M-H	750	50 x 50	Wet	Foam	Stud
	Adult	4200	84	28 x 44	Solid	Foam	Stud
	Adult	4535M	٥	32 x 44	Wet	Foam	Stud
	Adult/Pediatric	4831Q	•	37 x 37	Solid	Foam	Stud
	Adult	4841P	•	42 x 42	Solid	Foam	Graphite Stud
Resting	Adult	0315M		21 x 35	Solid	Polymer	Tab
	Adult	0415M		23 x 34	Solid	Polymer	Tab
	Adult	0715M		26 x 34	Solid	Polymer	Tab
Resting	Adult/Pediatric Adult Adult Adult	4831Q 4841P 0315M 0415M		37 x 37 42 x 42 21 x 35 23 x 34	Solid Solid Solid	Foam Foam Polymer Polymer	Stud Graphite Stud Tab

AMBU ELECTRODES - QUALITY IN EVERY ASPECT



Highly refined manufacturing processes and quality controls ensure the Ambu electrode quality.

Pioneering and innovating for more than 4 decades

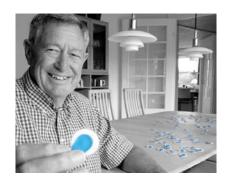
Through more than 40 years of experience with developing and optimizing ECG electrodes, Ambu has become a trusted partner for numerous hospitals, clinics and EMS service providers. We sell more than 800 million electrodes worldwide every year, and we strive to be the epitome of reliability and convenience in every situation.

Since our engineers developed the offset connector more than four decades ago, we have been continuously optimizing our products with unique features based on insights gained through close collaboration with users from all over the world.

A comprehensive range of electrodes

Electrodes need to be easy to use without extensive preparation. They must be equipped with features that ensure patient comfort and ease of use without compromising reliability and signal quality.

Over time, we have gained invaluable experience and understanding, enabling us to create a comprehensive range of electrodes.



Ambu Engineer Jan Rasmussen developed the offset connector more than 40 years ago - its technical advantages are still superior.



Ambu BlueSensor proudly sponsors the Xtreme Everest project, a research mission to find the underlying physiological reasons why some people cope better with low oxygen conditions than others.

BlueSensor

Ambu has more than 40 years of experience developing single-use electrodes. In 1976, the first Ambu® BlueSensor™ electrode came on the market. Today, BlueSensor offers a wide range of electrodes for various diagnosis and monitoring procedures.

Most BlueSensor electrodes feature offset design an innovation of Ambu, where the connector is strategically placed away from the sensor area. For electrodes with an onset connector, where all electrical components are stacked in the center, the sensor is subjected to both push and pull forces represented by taps on the connector and lead wire pulling, respectively. Offset connector mitigates the impact on signal quality from external forces. Moreover, an offset connector allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin. In situations where high quality signal is a must, an electrode with offset design is highly recommended.

WhiteSensor

Ambu WhiteSensor electrodes is a broad range of standard electrodes that cover basic needs within ECG.

The electrodes come with different sizes, shapes, gel types and backing materials to meet different needs.

GEL TYPE



Wet gel



Solid gel

BACKING MATERIALS



Cloth backing



Foam backing



Polymer backing



Microporous backing

FEATURES



Double ring adhesive



Silver sensor



Radiolucent



MR Conditional

BENEFITS



Occlusive backing



Breathable backing

BlueSensor KEY FEATURES

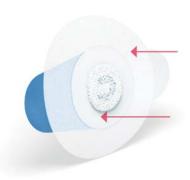
OFFSET CONNECTOR

- Mitigates the impact on signal quality from external forces like pulling of lead wires and pressure on electrodes.
- Allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin.



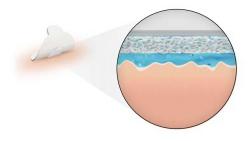
DOUBLE RING ADHESIVE*

- Secures fixture for long-term application and a stable signal throughout the monitoring period.
- The outer ring is for long-term wear, as adhesion increases with time.
- The inner ring on the polymer material "seals" the gel area and ensures a fast adhesion.



WET GEL

- Is highly conductive.
- Optimizes contact between skin and electrode.
- Lowers skin impedance effectively and immediately.

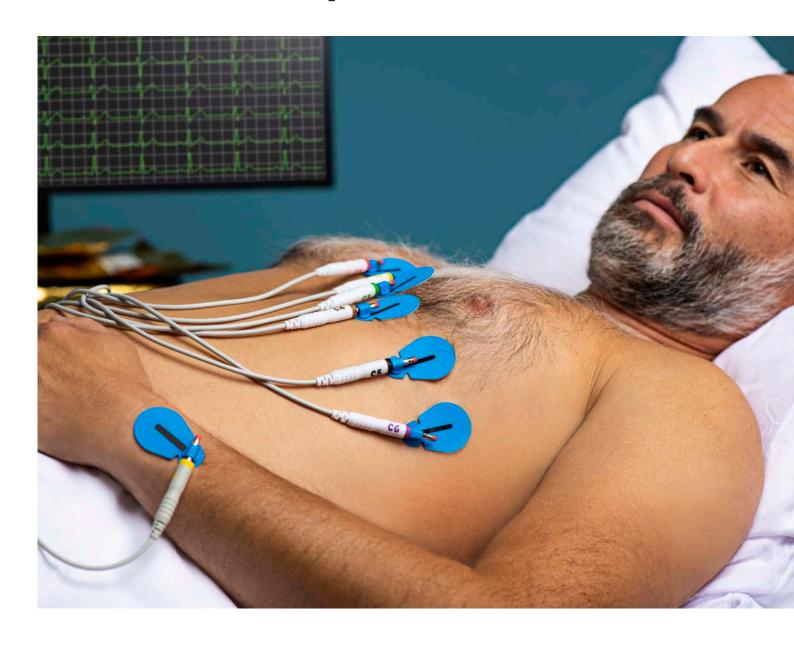


AG/AGCL SENSOR

- Is currently (as of May 2020) the gold standard biosensor material for surface electrodes.
- Ensures stable trace quality due to optimized conversion of the signal from biological to electrical.



RESTING ECG/12-LEAD ECG



Ambu offers a broad range of electrodes for ECG resting procedures to meet various hospital needs.

BENEFITS:

- Stable trace quality
- Suitable adhesion
- No need for adaptors

- Conductive wet gel lowers skin impedance effectively and immediately
- Wet gel optimizes contact between skin and electrode
- Offset connector mitigates the impact on signal quality from external forces like the pulling of lead wires and pressure on electrodes
- Offset connector allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin
- Occlusive backing material is resistant to fluids
- Ag/AgCl sensor ensures stable signal quality
- The tab version is radiolucent and MR Conditional

BlueSensor SU-00-A









BlueSensor SU-00-C













BlueSensor SU-00-A



Size: 49 x 33 mm

BlueSensor SU-00-C



Size: 49 x 33 mm

24 months shelf life

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
SU-00-A/60	10	60	600	1200
SU-00-C/100	10	100	1200	2400

FEATURES AND BENEFITS:

- Conductive solid gel
- Convenient in size
- Radiolucent and MR Conditional

BlueSensor 2300













BlueSensor 2300



Size: 34 x 23 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
BS-Tab-2300/100	10	100	500	5000

- Conductive solid gel
- The fish tail tab design reduces electrode lift-offs even if the adaptor kinks
- Radiolucent and MR Conditional

WhiteSensor 0315M, 0415M, 0715M













WhiteSensor 0315M



Size: 21 x 35 mm

WhiteSensor 0415M



Size: 23 x 34 mm

WhiteSensor 0715M

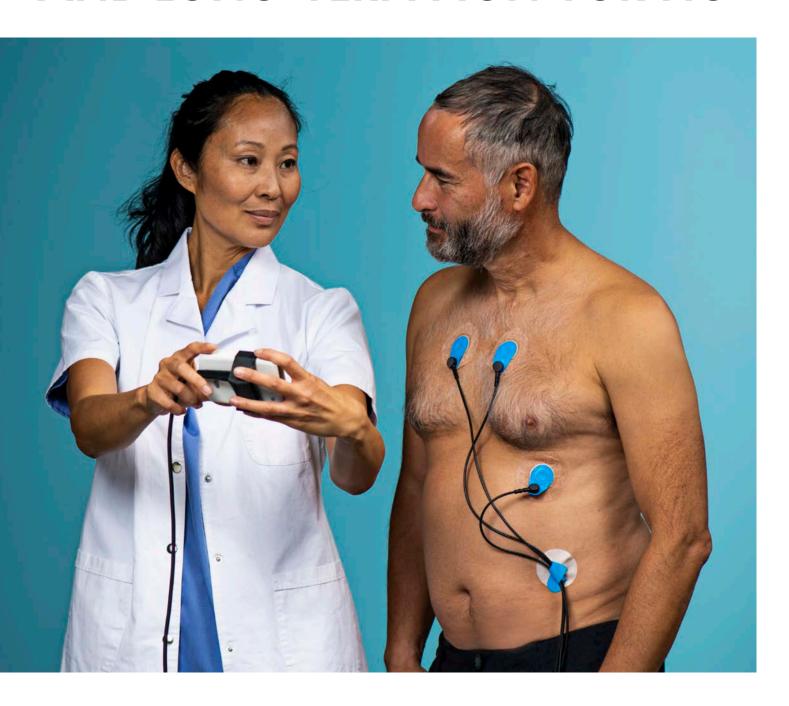


Size: 26 x 34 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
0315M	10	100	500	5000
0415M	10	100	500	5000
0715M	10	100	500	5000



HOLTER, EVENT RECORDING AND LONG-TERM MONITORING



BENEFITS:

- Stable trace quality
- Suitable adhesion
- No need for adaptors

- Conductive wet gel lowers skin impedance effectively and immediately
- Wet gel optimizes contact between skin and electrode
- Combination of fast and long-term adhesives secures fixation and a stable signal
- Thin microporous backing material allows the skin to breathe
- Offset connector mitigates the impact on signal quality from external forces like the pulling of lead wires and pressure on electrodes
- Offset connector allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin
- Ag/AgCl sensor ensures stable signal quality

BlueSensor L. VL, VLC











BlueSensor L



Size: 68 x 55 mm

BlueSensor VL



Size: 72 x 68 mm

BlueSensor VLC



Size: 72 x 68 mm

15 months shelf life: BlueSensor VLC 24 months shelf life: BlueSensor L, VL

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
L-00-S/5	1	5	500	1000
L-00-S/25	1	25	500	1000

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
VL-00-S/10	1	10	500	1000
VL-00-S/25	1	25	500	1000

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
VLC-00-S/4	1	4	500	1000
VLC-00-S/10	1	10	500	1000
VLC-00-S/25	1	25	500	1000

HOLTER, EVENT RECORDING, AND LONG-TERM MONITORING

FEATURES AND BENEFITS:

- Conductive wet gel supporting stable signal
- Strong high-tech adhesive foam
- Soft cloth backing ensures comfort during application
- Radiolucent and MR Conditional

WhiteSensor 4440













WhiteSensor 4440



Size: 55 mm diameter

24 months shelf life

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
4440	1	30	300	3000
4440/3	3	3	600	3600
4440/5	5	5	750	4500

FEATURES AND BENEFITS:

- Conductive solid gel ensures reliable recordings
- Enhanced adhesion
- Comfortable non-woven cloth backing

WhiteSensor CMM/1









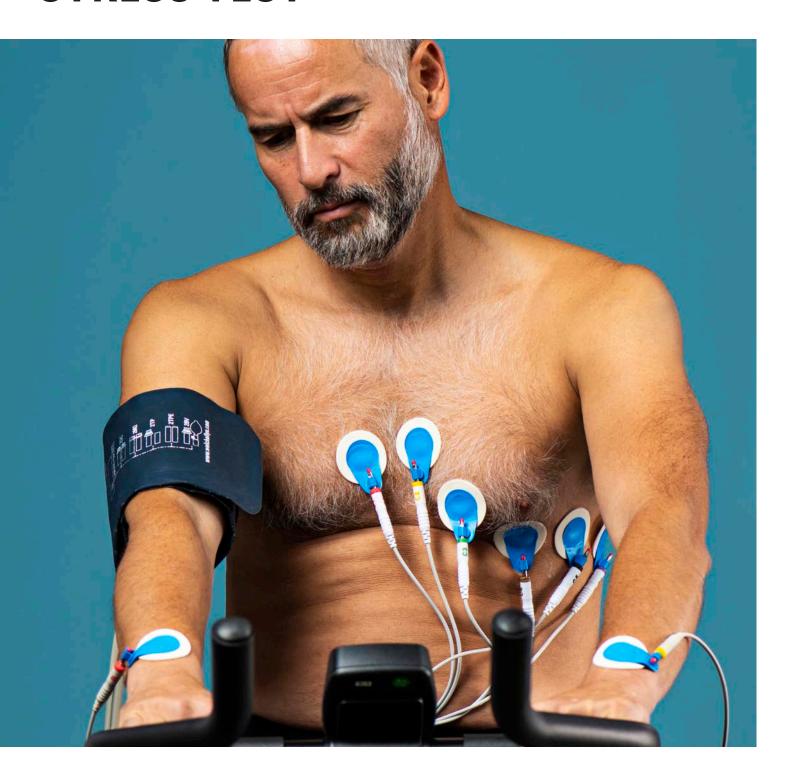
WhiteSensor CMM/1



Size: 50 mm diameter

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
CMM/1-00-S/30	1	30	1200	7200

STRESS TEST



BENEFITS:

- Stable trace quality
- Suitable adhesion

- Conductive wet gel lowers skin impedance effectively and immediately
- Wet gel optimizes contact between skin and electrode
- Adhesive is gentle to the skin
- Offset connector mitigates the impact on signal quality from external forces like the pulling of lead wires and pressure on electrodes
- Offset connector allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin
- Ag/AgCl sensor ensures stable signal quality

BlueSensor R, SP, T









BlueSensor R



Size: 57 x 48 mm

BlueSensor SP



Size: 42 x 38 mm

BlueSensor T



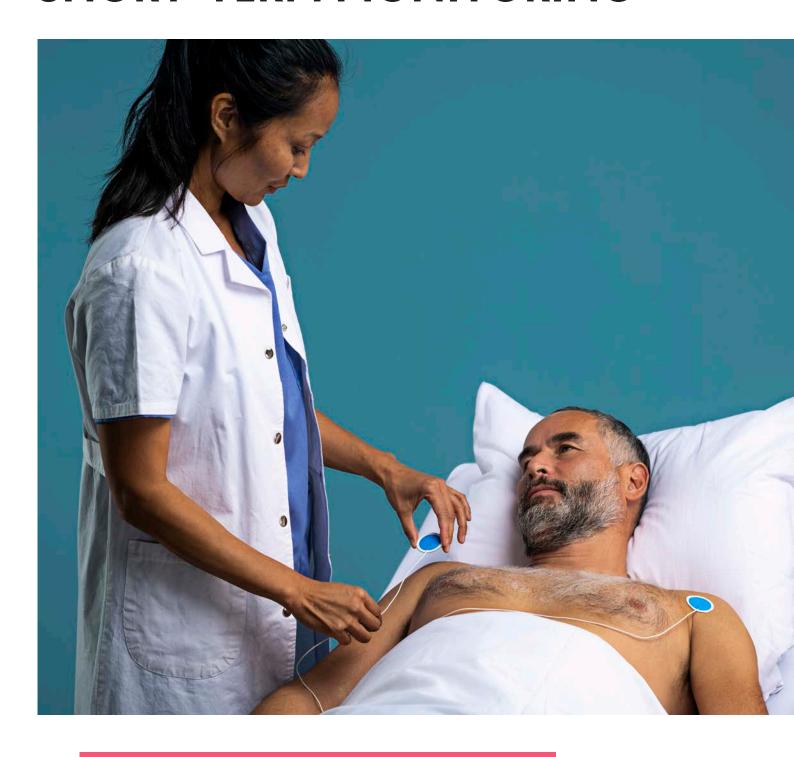
Size: 57 x 35 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
R-00-S/3	1	3	252	504
R-00-S/4	1	4	500	1000
R-00-S/5	1	5	500	1000
R-00-S/7	1	7	504	1008
R-00-S/10	1	10	500	1000
R-00-S/25	1	25	500	1000

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
SP-00-S/4	1	4	500	1000
SP-00-S/10	1	10	1000	2000
SP-00-S/50	1	50	1000	2000

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
T-00-S/25	1	25	500	1000

SHORT-TERM MONITORING



BENEFITS:

- Stable signal quality
- Suitable adhesion
- Fast and easy to use

- Conductive wet gel lowers skin impedance effectively and immediately
- Wet gel optimizes contact between skin and electrode
- Adhesive is suitable for short-term application
- Occlusive backing material is resistant to fluids
- Offset connector mitigates the impact on signal quality from external forces like the pulling of lead wires and pressure on electrodes
- Offset connector allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin
- Ag/AgCl sensor ensures stable signal quality

BlueSensor M









BlueSensor Q









BlueSensor M



Size: 40 x 34 mm

BlueSensor Q



Size: 53.2 x 40 mm

15 months shelf life: BlueSensor M 24 months shelf life: BlueSensor Q

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
M-00-S/50	1	50	1000	2000
M-00-A/50	1	50	1000	2000
M-00-F/50	1	50	1000	2000

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
Q-00-S/25	1	25	500	1000



- Highly conductive wet gel
- Enhaced adhesion
- Flexible foam backing
- 4500M is radiolucent and MR Conditional

WhiteSensor 4500M











WhiteSensor 4500M-H, 4535M







WhiteSensor 4500M



Size: 50 mm diameter

WhiteSensor 4500M-H



Size: 50 mm diameter

WhiteSensor 4535M



Size: 32 x 44 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
4500M	3	30	300	3000
4500M/3	3	3	600	3600
4500M/5	5	5	750	4500
4500M-H	3	60	300	3000
4500M-H/3	3	3	600	3600
4500M-H/5	5	5	750	4500
4500M-H/10	5	10	300	3000
4535M	3	60	300	3000

- Ergonomic leaf shape
- Radiolucent and MR Conditional
- 4841P features flexible foam backing
- 7841P has a clear tape backing which has a high vapor transmission rate and makes the patient's skin visible during monitoring

WhiteSensor 4841P











WhiteSensor 7841P











WhiteSensor 4841P



Size: 42 x 42 mm

WhiteSensor 7841P



Size: 42 x 42 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
4841P	3	60	600	7200
7841P	3	60	600	7200
7841P/3	3	3	600	3600
7841P/5	5	5	750	4500



- Conductive solid gel
- Strong high-tech adhesive foam
- Flexible foam backing
- WS/RT is radiolucent and MR Conditional

WhiteSensor WS







WhiteSensor WS/RT











WhiteSensor WS



Size: 36 x 40 mm

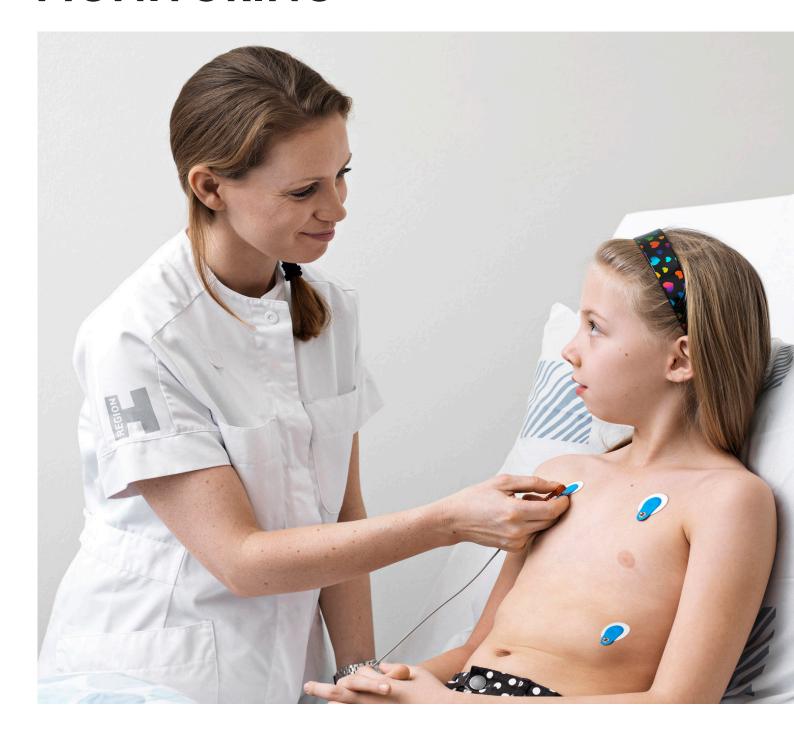
WhiteSensor WS/RT



Size: 36 x 40 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
WS-00-S/3	3	3	600	3600
WS-00-S/4	4	4	60	600
WS-00-S/5	5	5	60	600
WS-00-S/10	5	10	60	600
WS-00-S/30	1	30	600	7200
WS-00-S/50	1	50	600	7200
WS-00-S/RT/3	3	3	600	3600
WS-00-S/RT/5	5	5	1000	6000
WS-00-S/RT/50	1	50	600	7200

PEDIATRIC/NEONATAL MONITORING



BENEFITS:

- Stable trace quality
- Suitable adhesion

- Skin-friendly solid gel supports the quality of the signal
- Soft cloth backing material allows the skin to breathe
- Extra small sizes fits neonatals
- Radiolucency allows the electrode to remain on the patient during X-ray procedures
- Wired with 1.5 mm or connector

BlueSensor BR, BRS











BlueSensor BR



Size: 28 x 20 mm

BlueSensor BRS



Size: 16 x 19 mm

18 months shelf life

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
BR-50-K/US/3	3	3	600	1200

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
BRS-50-K/US/3	3	3	600	1200

FEATURES AND BENEFITS:

- Skin-friendly solid gel supports the quality of the signal
- Offset connector mitigates the impact on signal quality from external forces like the pulling of lead wires and pressure on electrodes
- Offset connector allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin
- Ag/AgCl sensor ensures stable signal quality
- Available with various connectors and color coded lead wire

BlueSensor NF









BlueSensor NF



Size: 30 x 22 mm

BlueSensor NF-00-S



Size 44.3 x 22 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
NF-00-S/12	3	12	1200	2400
NF-50-K/3/US	3	3	600	1200

- Conductive wet gel lowers skin impedance effectively and immediately
- Wet gel optimizes contact between skin and electrode
- Adhesive is suitable for short-term application
- Adhesive is gentle to the skin
- Offset connector mitigates the impact on signal quality from external forces like the pulling of lead wires and pressure on electrodes
- Offset connector allows the user to connect and disconnect the lead wire without applying pressure to the patient or the sensor area, which reduces the risk of gel spreading and adhesive detachment from skin
- Ag/AgCl sensor ensures stable signal quality

BlueSensor P, N







15 month shelf life: BlueSensor P 12 month shelf life: BlueSensor N 24 month shelf life: BlueSensor N-00-S

BlueSensor P



BlueSensor N



Size: 30 x 22 mm

BlueSensor N-00-S



Size: 44 x 22 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
P-00-S/10	1	10	1000	2000
P-00-S/50	1	50	1000	2000

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
N-00-S/25	1	25	1000	2000
N-10-A/25	1	25	1000	2000
N-50-F/25	1	25	500	1000
N-00-A/25	1	25	1000	2000
N-00-F/25	1	25	1000	2000
N-10-F/25	1	25	1000	2000
N-50-K/25	1	25	500	1000

FEATURES AND BENEFITS:

- Highly conductive solid gel and strong adhesion ensure a stable and secure tracing
- Comfortable and flexible foam backing
- Skin friendly throughout the duration of use <48 h
- Small-sized WSP25 electrode is for pediatric use and small/medium-sized WSP30 electrode is both for children and adults

WhiteSensor WSP25, WSP30







WhiteSensor WSP25



Size: 32 x 25 mm

WhiteSensor WSP30



Size: 35 x 30 mm

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
WSP25-00-S/50	5	50	600	7200
WSP30-00-S/3	3	3	600	7200
WSP30-00-S/5	5	5	1000	6000
WSP30-00-S/50	5	50	600	7200

- Ergonomic leaf shape
- Flexible foam backing
- Can be used on both children and adults

WhiteSensor 4841Q







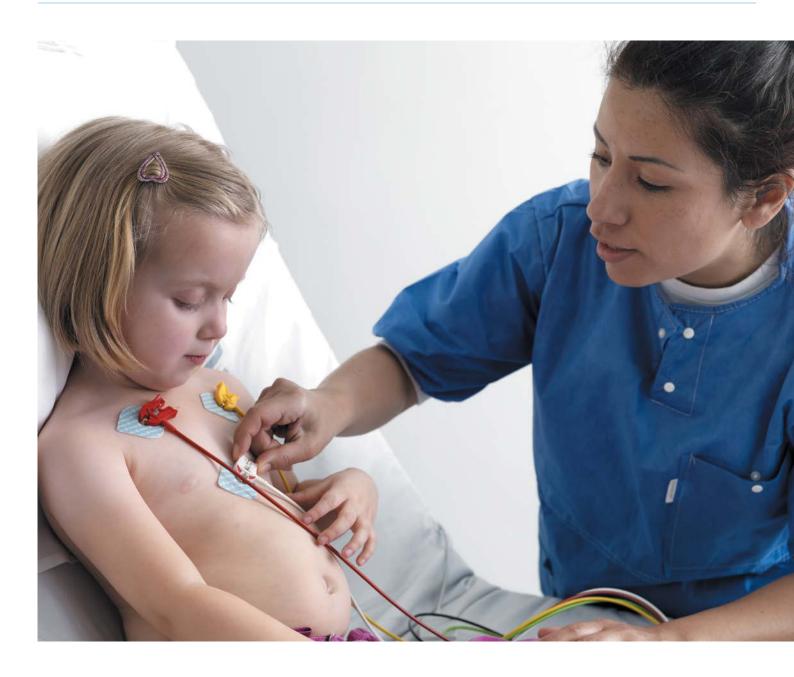
WhiteSensor 4831Q



Size: 37 x 37 mm

24 months shelf life

Reference number	Units/liner	Units/pouch	Units/inner box	Units/outer box
4831Q	3	60	600	3000



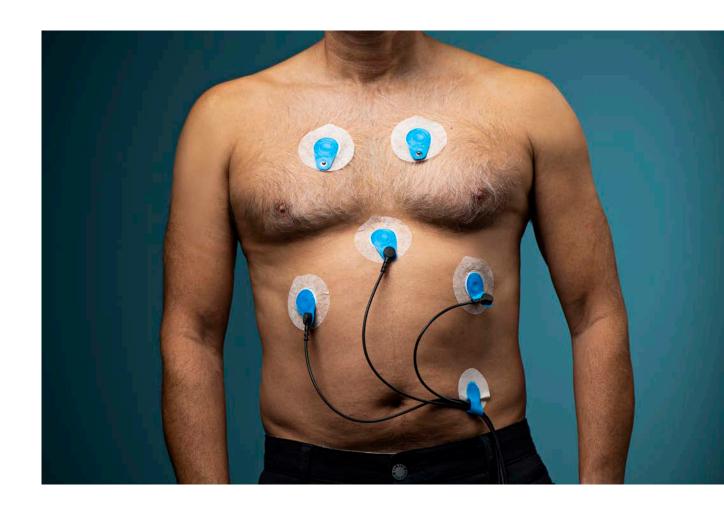
ACCESSORIES

FEATURES AND BENEFITS:

- Secures electrode leadwires on patients during Holter and Stress test
- Reduces movement artifacts on the ECG
- Minimizes the risk of electrodes falling off
- MR Safe
- Adhesive size: 55 mm
- Latex free
- Biocompatible



Reference number	Units/pouch	Units/inner box	Units/outer box
2703/50	50	500	3000





- Is used for skin preparation before electrode placement
- Abrasive to reduce skin impedance
- Adhesive on one side
- Small size fits finger tip

Skin Prep



Ref: 2121M

Reference number	Units/pouch	Units/inner box	Units/outer box
2121M	500	1500	15000







A HISTORY OF BREAKTHROUGH IDEAS

Ambu has been bringing the solutions of the future to life since 1937. Today, millions of patients and healthcare professionals worldwide depend on the efficiency, safety and performance of our single-use endoscopy, anaesthesia, and patient monitoring solutions.

The manifestations of our efforts have ranged from early innovations like the Ambu® Bag™ resuscitator and the Ambu BlueSensor electrodes to our newest landmark solutions like the Ambu aScope - the world's first singleuse flexible endoscope. Moreover, we continuously look to the future with a commitment to deliver innovative quality products that have a positive impact on your work.

Headquartered near Copenhagen in Denmark, Ambu employs approximately 4,500 people in Europe, North America and the Asia Pacific.

Ambu takes environmental issues seriously

Some of the greenest companies in the world are based in Denmark, and Ambu is inspired by this tradition.

Ambu environmental targets by 2025: All packaging will be recyclable, reusable or compostable; 50% reduction of carbon emissions compared to 2019 baseline; 95% PVC-free for products released after 2025.

For more information, please visit ambuUSA.com/cardiology

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