



Ambu – Everyday Solutions

Regional Anesthesia Needles and
Catheters for Peripheral Nerve Blocks

Temena Needles & Catheters

Superior products for regional anesthesia

- Wide range of needles and catheters
- Superior quality
- Echogenic stimulating needles
- Stimulating catheters available



The Idea

Full Range of Regional Anesthesia Products

In the field of Regional Anesthesia we offer a broad assortment of products, from Ultrasound needles, stimulating catheters and nerve stimulators, to our innovative ACTION Pain pumps for continuous nerve blocks. Or Regional Anesthesia solution offers all the necessary clinical tools to ensure optimal workflows and reduce costs for your facility.



Our Work

Customized by your feedback

Temena needles were designed with the anesthesiologist in mind. Our dual ergonomic hub design assists in keeping the needle steady during insertion. The ultrathin coating of parylene on our echogenic needles allows for clean visibility of the needles under ultrasound as well as a smooth and easy insertion. The Polymedic Hybrid needle is the perfect balance between echogenic properties and stimulating capabilities to ensure superior reliability for every situation.



Everyone's Life

Providing you with uncompromising quality & variety

A truly unique line of needles and catheters that offer various beveled tip designs, lengths, gauges and a needle with reliable echogenic properties.

Ultrasound - Single Injection

USC - 20° Bevel

Features and Benefits

- 20° bevel needles for peripheral nerve blocking under ultrasound guidance.
- The USC needle was designed for easy insertion through the skin, easy guidance through the tissue and a clean view of the needle tip under ultrasound guided techniques
- The echogenic properties of the USC needle are created by a unique coating that minimize artifacts but still produces a clear and quality image of the needle for easy detection of the needle when approaching the nerve.



Ordering Specifications

| ITEM NO. | NAME | DESCRIPTION | UNITS/BOX |
|-------------|--------------------------|--|-----------|
| 900 000 727 | Ultrasound Needle 50 mm | Polyplex Echogenic Needle, 22G x 50mm | 10 |
| 900 000 728 | Ultrasound Needle 90 mm | Polyplex Echogenic Needle, 21G x 90mm | 10 |
| 900 000 729 | Ultrasound Needle 120 mm | Polyplex Echogenic Needle, 21G x 120mm | 10 |

*Ask your representative for other sizes available

USB - 30° Bevel

Features and Benefits

- 30° Bevel Needles for Peripheral Nerve Blocking Under Ultrasound Guidance.

Ordering Specifications

| ITEM NO. | NAME | DESCRIPTION | UNITS/BOX |
|-------------|-------------------------|---------------------------------------|-----------|
| 900 000 730 | Ultrasound needle 50 mm | Polyplex Echogenic Needle, 22G x 50mm | 10 |
| 900 000 731 | Ultrasound Needle 90 mm | Polyplex Echogenic Needle, 21G x 90mm | 10 |

*Ask your representative for other sizes available

Ultrasound - Echogenic Stimulation

Hybrid Needles

Features and Benefits

- 20 degree bevel for easy insertion.
- The Hybrid needle offers both echogenic and stimulating properties while performing peripheral nerve blocks..
- The echogenic needle is manufactured with an ultrathin coat coating that does enhance needle detection under ultrasound.
- This needle offers a high resolution in both techniques.

Ordering Specifications

| ITEM NO. | NAME | DESCRIPTION | UNITS/BOX |
|-------------|-------------------------|---------------------------------------|-----------|
| 900 000 724 | Ultrasound Needle 55 mm | Polplex Echo Stimulating, 22G x 55mm | 10 |
| 900 000 725 | Ultrasound Needle 95 mm | Polplex Echo Stimulating, 21G x 95 mm | 10 |
| 900 000 726 | Ultrasound Needle 150mm | Polplex Echo Stimulating, 21G x 150mm | 10 |

*Ask your representative for other sizes available



Ultrasound - Continuous

Echo-Polyplex - 20° Bevel

Features and Benefits

- Echo-polyplex offers our USC needle with all its typical advantages in one set with a catheter and a teflonized stylet.
- Connector type is Tuohy Borst and filter is a 0,2μ.
- Sets for continuous peripheral nerve blocks with ultrasound needle and ultrasound catheter.

Ordering Specifications

| ITEM NO. | NAME | DESCRIPTION | STYLET | OTHERS | UNITS/BOX |
|-------------|------------------|---|------------|-----------------|-----------|
| 900 000 733 | echo-polyplex 50 | Echo Polyplex 50: 18G x 50mm needle, 20G x 400mm catheter | Teflonized | - Thread device | 10 |
| 900 000 734 | echo-polyplex 50 | Echo Polyplex 90: 18G x 90mm needle, 20G x 400mm catheter | Teflonized | - Thread device | 10 |

*Ask your representative for other sizes available

Echo-Polyplex C50K EH

Features and Benefits

- This hybrid set was conceived especially for peripheral nerve blocks and contains the basic set up needs, which are necessary for undertaking continuous nerve blocks under ultrasound guidance.

Ordering Specifications

| ITEM NO. | NAME | DESCRIPTION | ACCESSORIES | UNITS/BOX |
|-------------|-----------------------|--------------------------|--|-----------|
| 900 000 732 | Echo-Polyplex C50K EH | Echo Polypex, 18G x 50mm | <ul style="list-style-type: none">- With Introducer- Catheter fixation- Extension tube with phtalate free PVC surgical sponge- 10 Gauze sponges 10 X 10 cm- Adhesive drape- Transparent drape | 10 |

*Ask your representative for other sizes available

Single Injection - Stimulation

UPA - Pencil Point

Features and Benefits

- The UPA stimulation needle offers a non-traumatic pencil point
- Its over moulded ergonomic hub covers the connection between the needle, the extension tube and the connecting cable, avoiding any leaking of liquid.
- The needle is coated with insulating polyesters in order to increase its smooth gliding capacity within the tissues reducing the pain of the patient.
- Stimulation area is isolated to the extreme tip of the needle to reduce the stimulation field and create higher precision.
- 2 mm female electric connection, compatible with all standard peripheral nerve stimulators.
- Centimetric markings on the entire length to enable visual control of the penetration depth.



Ordering Specifications

| ITEM NO. | NAME | NEEDLE DIAMETER | NEEDLE LENGTH | UNITS/BOX |
|-------------|--------|-----------------|---------------|-----------|
| 900 000 700 | UPA 90 | 21 G | 90 mm | 10 |

*Ask your representative for other sizes available

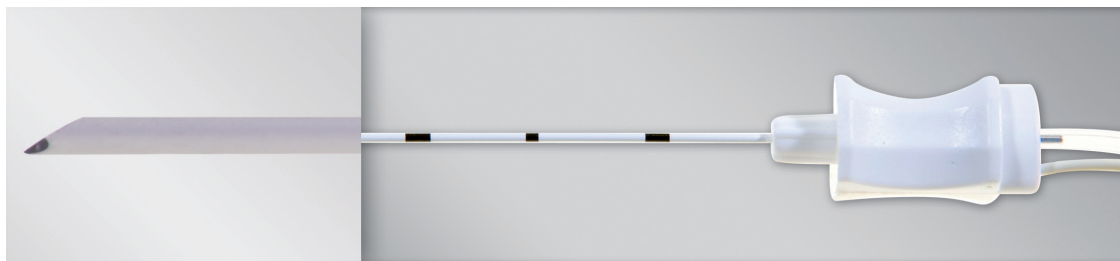
Also available upon request, 45° beveled cut needles.

Single Injection - Stimulation

UPB - 30° Bevel

Features and Benefits

- Stimulation needles with double "back cut" 30° bevel.
- Its over moulded ergonomic hub covers the connection between the needle, the extension tube and the connecting cable, avoiding any leaking of liquid.
- The needle is coated with insulating polyesters and a smooth silicon surface to increase its gliding capacity within the tissues, reducing the pain of the patient.
- The bevel's surface is free from polyesters and its stimulation area extends along its entire length.
- 2 mm female electric connection, the needles are compatible with all standard peripheral nerve stimulators.



Ordering Specifications

| ITEM NO. | NAME | NEEDLE DIAMETER | NEEDLE LENGTH | UNITS/BOX |
|-------------|---------|-----------------|---------------|-----------|
| 900 000 701 | UPB 25 | 24 G | 25 mm | 10 |
| 900 000 702 | UPB 35 | 24 G | 35 mm | 10 |
| 900 000 703 | UPB 50 | 22 G | 50 mm | 10 |
| 900 000 704 | UPB 70 | 22 G | 70 mm | 10 |
| 900 000 705 | UPB 90 | 21 G | 90 mm | 10 |
| 900 000 706 | UPB 100 | 21 G | 100 mm | 10 |
| 900 000 707 | UPB 120 | 21 G | 120 mm | 10 |
| 900 000 708 | UPB 150 | 21 G | 150 mm | 10 |

*Ask your representative for other sizes available

Single Injection - Stimulation

UPC - 20° Bevel

Features and Benefits

- Stimulation needles with 20° bevel.
- Its over moulded ergonomic hub covers the connection between the needle, the extension tube and the connecting cable, avoiding any leak of liquid.
- The needle is coated with insulating polyesters and a smooth silicon surface to increase its gliding capacity within the tissues, reducing the pain of the patient.
- Only the extreme tip of the needle is not insulated and stimulates, providing a reduced stimulation field and a higher precision.
- With their 2 mm female electric connection, the needles are compatible with all standard peripheral nerve stimulators.
- These needles have centimetric markings on the entire length to enable visual control of the penetration depth.



Ordering Specifications

| ITEM NO. | NAME | NEEDLE DIAMETER | NEEDLE LENGTH | UNITS/BOX |
|-------------|--------------|-----------------|---------------|-----------|
| 900 000 709 | UPC 25 | 24 G | 25 mm | 10 |
| 900 000 710 | UPC 50 | 22 G | 50 mm | 10 |
| 900 000 711 | UPC 70 | 22 G | 70 mm | 10 |
| 900 000 712 | UPC 90 | 21 G | 90 mm | 10 |
| 900 000 713 | UPC 90 - 22G | 22 G | 90 mm | 10 |

*Ask your representative for other sizes available

Single Injection - Stimulation

UPM - 45° Bevel

Features and Benefits

- The UPM stimulation needle offers a short 45° bevel.
- Its over moulded ergonomic hub covers the connection between the needle, the extension tube and the connecting cable, avoiding any leak of liquid.
- The needle is coated with insulating polyesters, and undergoes a dry siliconization in order to increase its smooth glide capacity within the tissues, reducing the pain of the patient.
- The entire bevel surface is free from polyesters and stimulates.
- These needles have centimetric markings on the entire length to enable visual control of the penetration depth.



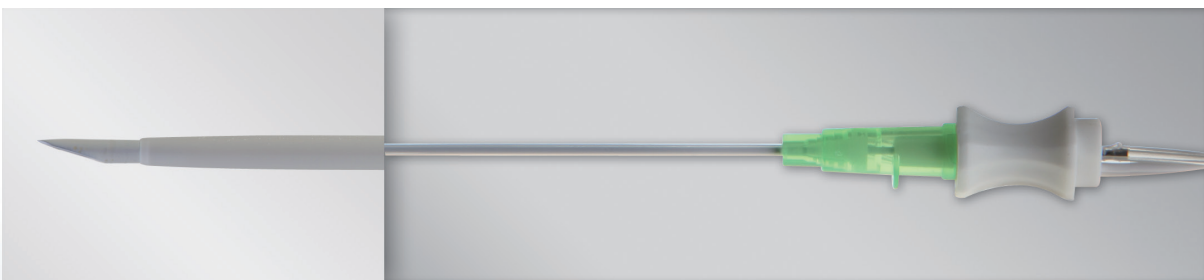
Call for part numbers and pricing.

Continuous with Stimulation

Polyplex C - 20° Bevel

Features and Benefits

- The polyplex C set offers our UPC stimulation needle with all its typical advantages of a 20° bevel needle, making it possible to pierce without previous incision.
- The teflonized stylet prevents possible kinking of the catheter and makes it possible to introduce the catheter deep into the nerve sheath.
- Connector type is Tuohy Borst and filter is a 0,2µ.
- Sets for continuous peripheral nerve blocks with 20° bevel stimulation needle and catheter.



Call for part numbers and pricing.

Continuous with Stimulation

Polyplex B - 30° Bevel

Features and Benefits

- Polyplex B set offers a UPB stimulation needle with all the advantages of a "back cut" bevel.
- The 30° back cut bevel improves the perception of the needle's passage through the different tissues.
- The teflonized stylet prevents possible kinking of the catheter and makes it possible to introduce the catheter deep into the nerve sheath.
- Connector type is Tuohy Borst and filter is a 0,2μ.
- Sets for continuous peripheral nerve blocks with 30° "back cut" bevel stimulation needle and catheter.



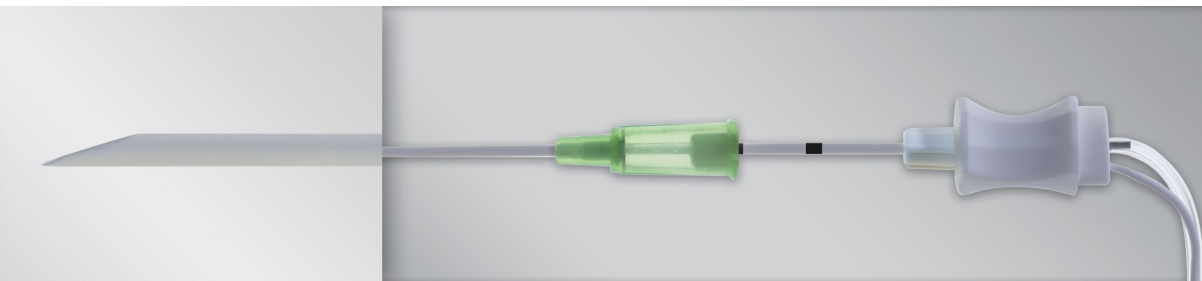
Ordering Specifications

| ITEM NO. | NAME | NEEDLE SIZE | IV CANNULA SIZE | CATHETER SIZE | STYLET | OTHERS | UNITS/BOX |
|-------------|--------------|----------------|-----------------|---------------|----------------|--|-----------|
| 900 000 715 | polyplex B90 | 21G x 102,3 mm | 18G x 51 mm | 21G x 400 mm | Teflon™ coated | - Catheter Fixation - Thread device | 10 |

Polyplex CT - 20° Bevel

Features and Benefits

- Polyplex CT sets offer the same features as standard polyplex C sets, but with a fairly shorter IV cannula.
- The reduced length of the IV cannula makes the puncture easier because the tip of the IV cannula is distant from the tip of the needle. The diameter of the puncture corresponds to the O.D. of the 21 G stimulation needle.
- As soon as the nerve has been located, the IV cannula can slide until the first centimetric marking is visible on the stimulation needle, indicating very precisely that the tip of the IV cannula has reached the tip of the needle.



| ITEM NO. | NAME | NEEDLE SIZE | IV CANNULA SIZE | CATHETER SIZE | STYLET | OTHERS | UNITS/BOX |
|-------------|----------------|--------------|-----------------|---------------|----------------|--|-----------|
| 900 000 720 | polyplex C100T | 21G x 100 mm | 18G x 51mm | 20G x 400 mm | Teflon™ coated | - Catheter Fixation - Thread device - Mini scalpel | 10 |

Continuous with Stimulation

Polyplex CK - 20° Bevel

Features and Benefits

- Sets for continuous peripheral nerve blocks with catheter through needle technique and UPC needle without IV cannula.
- Polyplex CK sets offer the same features as polyplex C sets but without the help of an IV catheter.
- The catheter is introduced directly into the inner lumen of the stimulation needle, which obviously has a wider diameter than a polyplex C needle with IV catheter (18G instead of 21G).
- The absence of IV catheter reduces time for catheter insertion.
- Connector type is Tuohy Borst and filter is a 0,2μ.



Ordering Specifications

| ITEM NO. | NAME | NEEDLE SIZE | CATHETER SIZE | STYLET | OTHERS | UNITS/BOX |
|-------------|----------------|--------------|---------------|----------------|--|-----------|
| 900 000 719 | polyplex C150K | 18G x 150 mm | 21G x 500 mm | Teflon™ coated | - Catheter Fixation - Extension tube - Thread device | 10 |

*Ask your representative for other sizes available

Continuous with Stimulation

Polyplex T - Tuohy

Features and Benefits

- Sets for continuous peripheral nerve blocks with catheter and Tuohy needle without IV cannula.
- Polyplex T sets offer the same advantages as polyplex CK sets, with a Tuohy type needle instead of a 20° bevel.
- The Tuohy needle allows the catheter to be withdrawn diagonally, which makes the introduction into certain vascular nerve sheaths easier (Scalenus, Ischiadicus....).
- Connector type is Tuohy Borst and filter is a 0,2μ.



Ordering Specifications

| ITEM NO. | NAME | NEEDLE SIZE | CATHETER SIZE | STYLET | OTHERS | UNITS/BOX |
|-------------|---------------|--------------|---------------|----------------|--|-----------|
| 900 000 716 | polyplex T50 | 18G x 50 mm | 21G x 500 mm | Teflon™ coated | - Catheter Fixation - Extension tube - Thread device | 10 |
| 900 000 717 | polyplex T90 | 18G x 90 mm | 21G x 750 mm | Teflon™ coated | - Catheter Fixation - Extension tube - Thread device | 10 |
| 900 000 718 | polyplex T150 | 18G x 150 mm | 21G x 900 mm | Teflon™ coated | - Catheter Fixation - Extension tube - Thread device | 10 |

*Ask your representative for other sizes available

Continuous Stimulating Catheter

Polyplex T Plus Arro - Tuohy

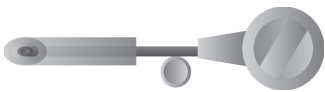
Features and Benefits

Polyplex T plus ARRO offer the following advantages versus other versions:

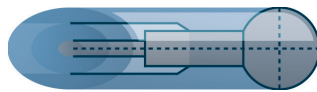
- The Tuohy needle exposes more uncoated cannula surface at the tip and added wings for axial stability.
- The catheter has an increased diameter as well as the stylet and a ball tip to increase the stimulating field.
- The catheter material is different in order to increase stiffness and offers an extension of marking length.
- The new J-Clip system enables the use of a polyplex set with one hand, facilitating the catheter introduction and increasing safety.
- The stimulation can be performed by 2 techniques:
 - Using the J-Clip over a Tuohy needle.
 - Using an electroconductive Tuohy Borst adapter over the stylet.
- Connector type is Tuohy Borst and New J Clip. The filter is a 0,2μ.
- Sets for continuous peripheral nerve blocks with stimulating catheter and Tuohy needle without IV cannula.



Catheter's double stylet



Catheter's tip



J-Clip



TBA-Ring



Ordering Specifications

| ITEM NO. | NAME | NEEDLE SIZE | CATHETER SIZE | STYLET | OTHERS | UNITS/BOX |
|-------------|-------------------------|--------------|------------------------|---------------------|--|-----------|
| 900 000 721 | polyplex T50 plus Arro | 17G x 50 mm | 21G (0.88 mm) x 600 mm | Stimulating 0.15 mm | - Catheter Fixation - Extension tube - Thread device | 10 |
| 900 000 722 | polyplex T90 plus Arro | 17G x 90 mm | 21G (0.88 mm) x 600 mm | Stimulating 0.15 mm | - Catheter Fixation - Extension tube - Thread device | 10 |
| 900 000 723 | polyplex T150 plus Arro | 17G x 150 mm | 21G (0.88 mm) x 600 mm | Stimulating 0.15 mm | - Catheter Fixation - Extension tube - Thread device | 10 |

Peripheral Nerve Blocks - Stimulators & Accesories

Polystim II

Features and Benefits

- The polystim II peripheral nerve stimulator offers digital functions, a digital screen, a stimulation field from 0 to 5 mA, with 3 adjustable lengths of stimulating impulses.
- These features allow the peripheral nerve to be located rapidly.
- The actual current transmitted to the patient can be checked simultaneously.

Ordering Specifications

| ITEM NO. | DESCRIPTION | UNITS/BOX |
|-------------|---|-----------|
| 900 000 736 | Stimulator with accessories: monopolar connecting cable, alkaline battery, user's manual, protecting plastic box. | 1 |
| 900 000 735 | Monopolar connecting cable | 1 |



Peripheral Nerve Stimulator - SunStim™

SunStim

Features and Benefits

- Stimulator output current is fully adjustable from 0-70 mA.
- Switch functions:
 - Stand-by position: no stimulus pulses are generated.
 - Twitch: 1 pulse per second.
 - Tetanus: 100 Hz (100 pulses/s).
 - Built-in train of four: 4 pulses in a period of 2 seconds.
- Battery indicator light flashes when battery needs to be replaced.
- LED (green) battery light indicates that the unit is on, flashes on low battery.
- LED (red) flashes with audible indicator sounds each time a stimulus pulse is generated.
- Lightweight: 0.25lbs including battery.
- Standard battery: 9 volt alkaline.

Ordering Specifications

| ITEM NO. | DESCRIPTION | UNITS/BOX |
|-------------|--------------------------------------|-----------|
| 900 000 737 | SunStim™ Peripheral Nerve Stimulator | 1 |



Peripheral Nerve Stimulator - SunStim™ Plus

SunStim Plus

Features and Benefits

- Stimulator output current is fully adjustable from 0-70 mA.
- Switch functions:
 - Double burst: 2 60-ms bursts of 50 Hz separated by .75 s.
 - Twitch: 1 pulse per second.
 - Tetanus: 50 Hz (50 pulses/s) or 100 Hz (100 pulses/s).
 - Built-in train of four: 4 pulses in a period of 2 seconds.
- Stimulus pulse: square wave monophasic pulses.
- (200- μ s duration).
- LED (green) battery light indicates that the unit is on, flashes on low battery.
- LED (red) flashes with audible indicator sounds each time a stimulus pulse is generated.
- Lightweight: 0.25lbs including battery.
- Standard battery: 9 volt alkaline.

Ordering Specifications

| ITEM NO. | DESCRIPTION | UNITS/BOX |
|-------------|---|-----------|
| 900 000 738 | SunStim™ Plus Peripheral Nerve Stimulator | 1 |

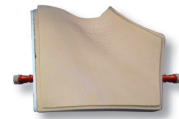


Innovative Peripheral Nerve Block Training Solutions

Upper Extremity



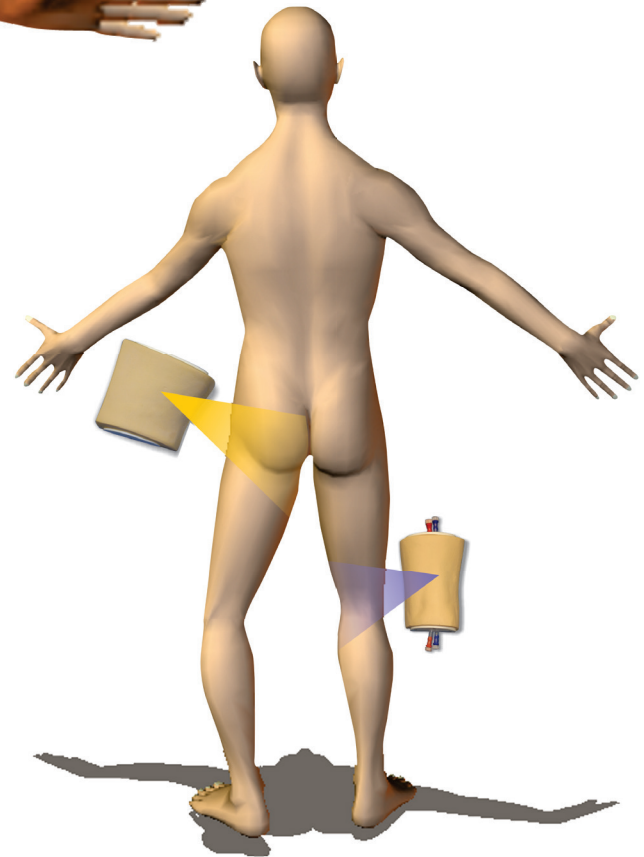
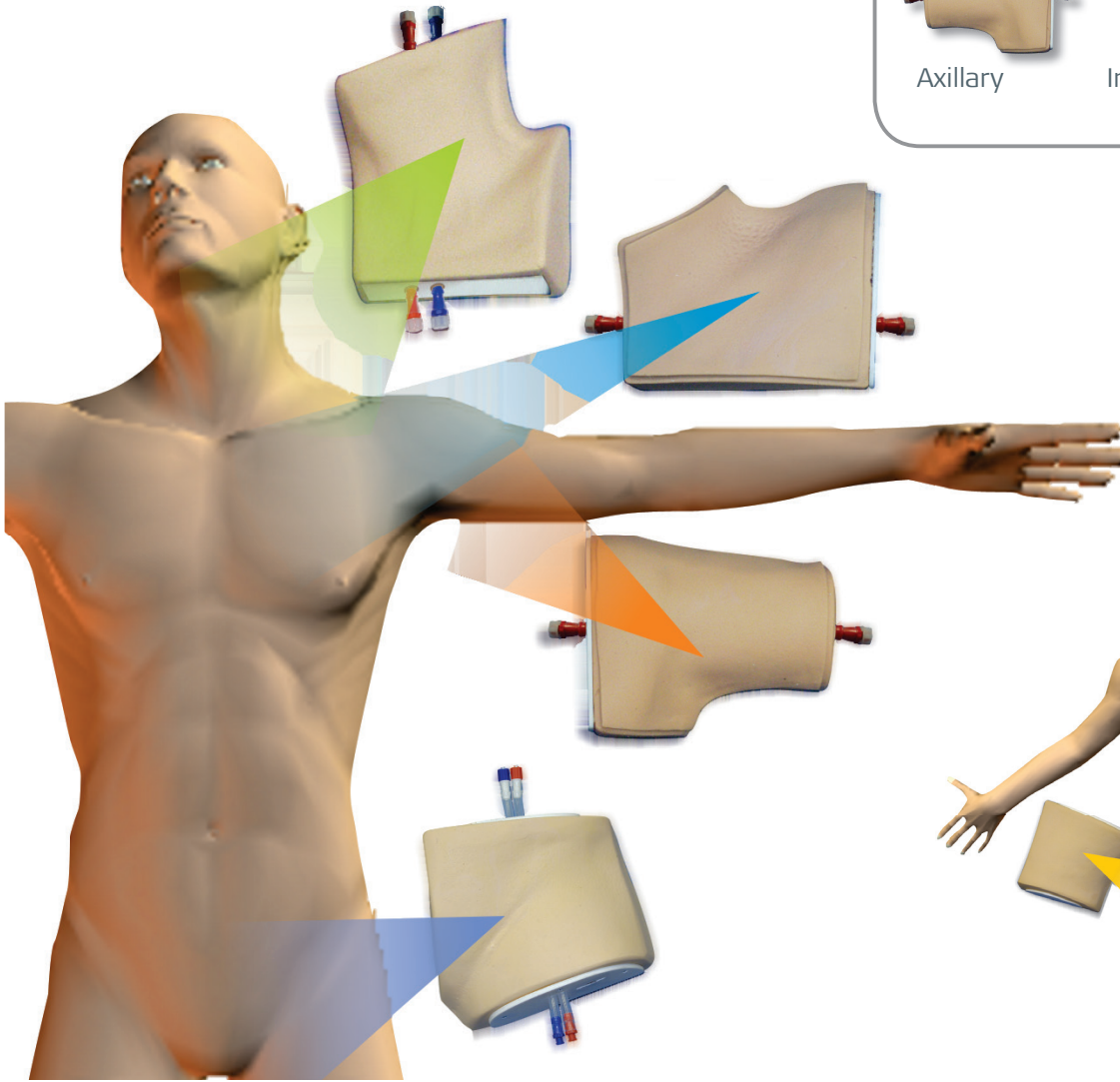
Axillary



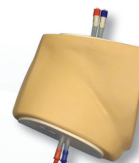
Infraclavicular



Interscalene
Supraclavicular



Lower Extremity



Femoral



Subgluteal



Popliteal

Realistic

The upper- and lower-extremity simulators:

- Contain all of the relevant surface landmarks, palpable subcutaneous anatomical structures and internal reference points associated with the blocks they represent.
- Exhibit realistic echogenic properties for the embedded muscle, vascular, bony and nervous structures.

| MODEL | SURFACE LANDMARKS | INTERNAL LANDMARKS |
|--|--|--|
| MiniSim™ Trainer MS-TRN | Universal ultrasound phantom (shown below) | Produces typical ultrasound images of veins, arteries, muscle, bone, and hyper- and hypo-echoic nerves |
| UPPER EXTREMITY SERIES - FULL SET - 900-000-238 | | |
| MODEL | SURFACE LANDMARKS | INTERNAL LANDMARKS |
| Interscalene / Supraclavicular 900-000-248 | <ul style="list-style-type: none"> Sternocleidomastoid muscle Cricoid Cartilage Supraclavicular fossa | <ul style="list-style-type: none"> First rib Clavicle Internal jugular vein Carotid and subclavian arteries Anterior and middle scalene muscles Brachial plexus roots / trunks |
| Infraclavicular 900-000-249 | <ul style="list-style-type: none"> Infraclavicular fossa Pectoralis major | <ul style="list-style-type: none"> Clavicle Coracoid process Pectoralis major and minor Axillary artery and vein Brachial plexus divisions/cords |
| Axillary 900-000-250 | <ul style="list-style-type: none"> Deltoid, coracobrachialis and biceps muscles Axilla | <ul style="list-style-type: none"> Biceps, triceps and coracobrachialis muscles Axillary artery and vein Brachial plexus branches |
| LOWER EXTREMITY SERIES - FULL SET - 900-000-239 | | |
| MODEL | SURFACE LANDMARKS | INTERNAL LANDMARKS |
| Sciatic sub-gluteal 900-000-252 | <ul style="list-style-type: none"> Buttock | <ul style="list-style-type: none"> Greater trochanter Ischial tuberosity Gluteus maximus Sciatic nerve |
| Femoral 900-000-253 | <ul style="list-style-type: none"> Inguinal crease | <ul style="list-style-type: none"> Anterior superior iliac spine Pubic tubercle Pubis Femoral nerve, artery and vein Iliopsoas and pectineus muscles |
| Popliteal 900-000-251 | <ul style="list-style-type: none"> Popliteal crease Biceps femoris, semimembranosus and semitendinosus muscles | <ul style="list-style-type: none"> Tibial, common peroneal and sciatic nerves Biceps femoris and semitendinosus muscles Popliteal artery and vein |

eZono™ 3000 Feature

System

- 26.4 cm (10.4") diagonal LCD touch screen with
- 24-bit and 60 million colors
- 8 GB internal memory
- 2x USB 2.0 ports, 1 Express Card port, built-in microphone

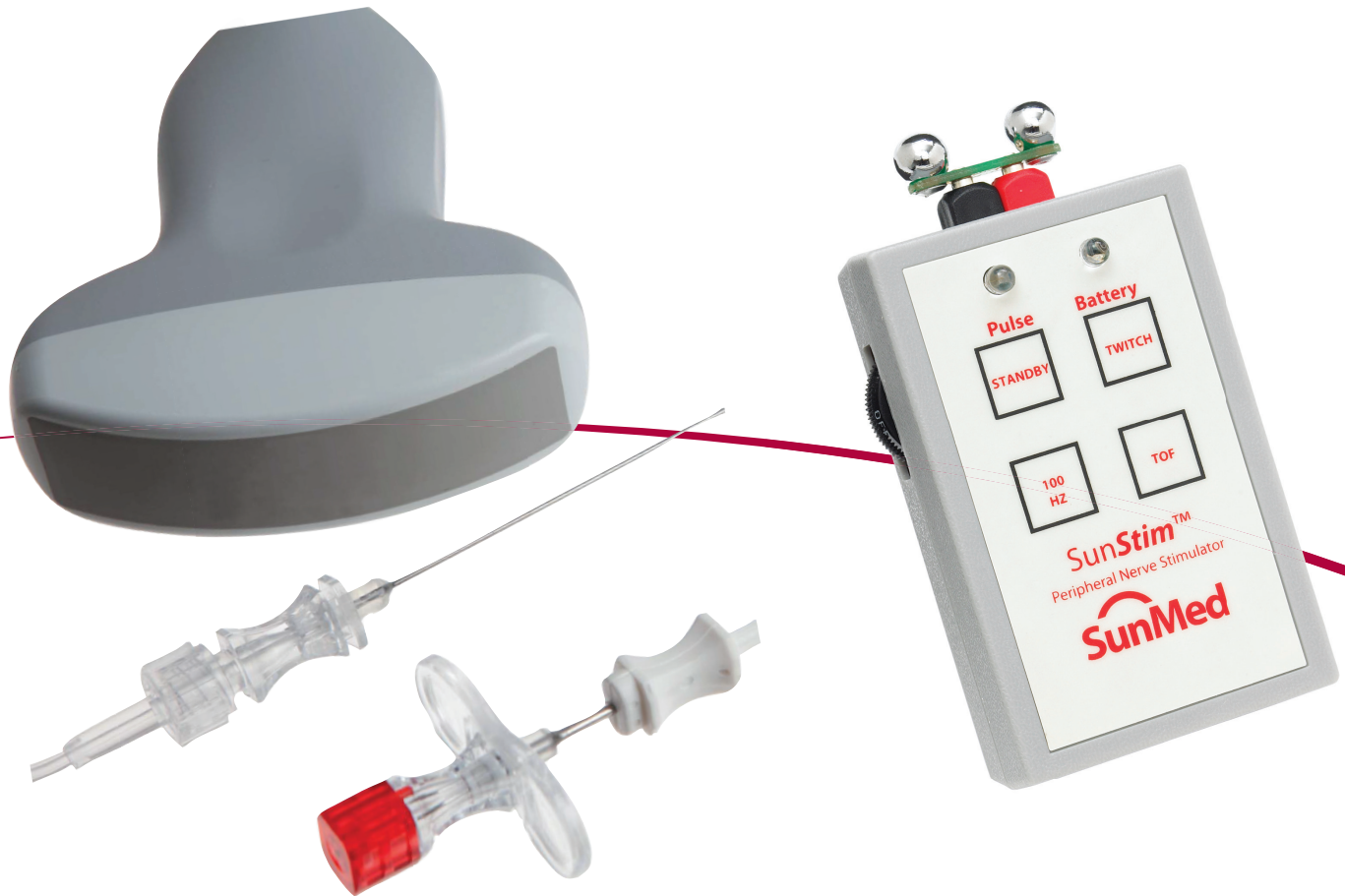
Software

- Free software updates via USB stick
- Less than 20 seconds boot time, less than 6 seconds back from stand-by
- Touch screen icon-based graphical user interface probes
- Linear, convex, and micro convex probes available
- Multi-media patient database
- Stores up to 30,000 pictures or 31 minutes of video internally
- Image transfer via USB stick



Model number: 900-000-236

Model Number 900-000-236 does not include stimulator or simulator pictured above



Sales Company
Ambu Inc.
6740 Baymeadow Drive
Glen Burnie, MD 21060
Tel.: 1 410 768 6464
1 800 262 8462
Fax. 1 800 262 8673
www.ambuUSA.com

Manufacturer
Ambu A/S
DK-2750 Ballerup
www.ambu.com