REUSABLE SURGICAL PROBE

Intraoperative Probe
Dopplex Intraoperative Probe – Reusable surgical 8MHz probe

Quality control is vitally important in performing surgery, if secondary intervention and re-operation are to be avoided. The Dopplex intraoperative probe can assist in the performance of safe surgery.

Using Doppler ultrasound the probes provide immediate evidence of success in vascular reconstructive procedures. By providing quality assurance of blood flow intraoperatively, time and costs of a potential re-operation can be avoided. Furthermore the risk of prolonged ischemic time is significantly reduced. The probe can also be used to locate medium sized vessels in skin flap planning and during cosmetic procedures.

Features at a glance

• Sterilisable by Autoclave, Ethylene Oxide or Steris System 1.
• Immediate visualisation of Doppler waveforms can confirm blood flow using the new DMX digital Doppler unit.
• 8MHz operation for reliable flow detection in native vessels and some prosthetic grafts.
• Simple operation – special electronic adaptor resists diathermy interference and allows connection to the Dopplex DMX waveform Doppler.
• A unique easy clean connector system.
• When using the Dopplex DMX, bi-directional velocity waveforms can be saved to the integral memory card and archived or printed using the Dopplex DR5 software package.
• Lightweight and easy to hold.

The easy to clean probes have been designed in close consultation with leading surgeons and meet exacting requirements for quality, ease of use and value for money. A unique, easy clean connector system has been developed to provide trouble free connection to the probe adaptor and the super flex cable does not kink or tangle when in use.

The probes are available in a variety of different packs:

• A starter pack which includes 3 probes, PA8XS adaptor and IV pole clamp.
• Extra probes are also available in packs of 3.
When used with the DMX Doppler, it provides a visual and audible indication of blood flow to aid the confirmation of vessel patency.
"Although I do appreciate the financial restrictions present in many hospitals, there is no doubt that having to take a blocked graft back to theatre or worse still, an amputation, will cost much more than several probes and the Doppler unit."

M Lewis, UK
Why use the Dopplex intraoperative probe?

**Infection Control**
The intraoperative probe can greatly reduce the risk of infection during surgery caused by non sterile products being used within the sterile field.
The fully sterilisable probe ensures that high quality Doppler signals can be obtained from vessels without compromising the sterile barrier.

**Palpating A Pulse Does Not Confirm Flow**
The intraoperative probe is an excellent Quality Assurance tool and has benefitted many surgeons during operations. Palpating the vessel for a good pulse does not indicate that distal run off is adequate.
A good pulse can be obtained from a blocked distal vessel and is often misleading.

"The intraoperative probe guarantees good infection control by eliminating the need of putting a standard probe into a glove, which brings the Doppler and cable into the sterile field."
S. Shiralkar, UK

"At completion, we have on several occasions obtained a good pulse proximal to a graft but no flow when using the intraoperative probe and without exception resorted to removal of a clot."
M. Lewis, UK

"Listening to the quality of the Doppler signal from a hand held Doppler probe necessitated putting a standard probe inside a sterile glove full of gel. This was cumbersome and messy and there was a risk of de-sterilising the operative field with the probe cable. The intraoperative probes are reliable and rugged and the risk of compromising the sterile field has been all but eliminated."
R. Salaman, UK

"Just feeling the pulse in the graft gives a false sense of security as the vessel maybe blocked distally. In these situations, the whole graft will get blocked in the post-operative period, requiring re-exploration...
...Good tri-phasic sounds from the graft rules out distalthrombosis and proves distal patency, which is very reassuring to the surgeon before finishing the operation."
S. Shiralkar, UK
Where the Dopplex intraoperative probe can be used

The intraoperative probe can be used in a wide range of clinical procedures, these include:

- Carotid Endarterectomy
- Femoro-popliteal bypass
- In-situ femoro-distal bypass
- Detection of flow in arteriovenous fistulae
- Coronary artery bypass grafts
- Renal and hepatic transplantation
- Renal blood flow confirmation post aortic aneurysm repair
- Cosmetic surgery
- Skin flap surgery

The reusable Dopplex Intraoperative probe can be used to immediately confirm blood flow prior to closing, saving time and costs of a potential re-operation.

The high sensitivity probes are available in packs of three and can be re-sterilised by Autoclave, Ethylene Oxide or Steris System 1. This allows spares to be available in case of contamination.

The probes have been specially designed to be lightweight, easy to hold, and should be used instead of a standard probe placed in a sterile glove.

Probes are compatible with the entire Dopplex range of hand held Dopplers. When used with the new DMX Digital Doppler unit, immediate visualisation of Doppler waveforms can confirm blood flow.

The Dopplers can be mounted onto an IV pole using the specially designed pole clamp or the pole stand.

“Flaps based on perforator arteries are becoming increasingly popular... By using the intraoperative Doppler probe to check the perforator vessels the flap design can be reliably adjusted intraoperatively to tailor the tissue to the defect without compromising the blood supply.”

M. Kernohan, UK
Documentation and Archiving

Dopplex DR5 is a unique vascular reporting software package for use in conjunction with the Dopplex DMX.

It allows real time visualisation of waveforms on a PC. An unlimited number of traces can be transferred and stored for reviewing, archiving and printing.

Key features of DR5 Lite include:

- Displays Doppler colour spectral waveforms in real time
- Replay of Doppler waveforms and flow separated sounds
- An integral database for patient data storage and Doppler sound files
- The facility to package tests together and email them for review (V5.2)
- A PDF generator enables the final reports to be saved and transferred to an external EPR system
- Calculate Doppler indices and flow rate (V5.1)

Dopplex DR4 is also available for display of waveforms and data from the MD200 and Dopplex Ability.

Doppler Spectral Display

Doppler colour spectral waveforms can be visualised in real time

Report Style Printouts

Multiple traces can be stored, archived and printed for reports
Intraoperative Probe Options

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<tr>
<td>Starter Pack</td>
<td>ISP3XS</td>
<td>Includes PA8XS Probe Adaptor, Clamp and 3 Intraoperative Probes</td>
</tr>
<tr>
<td>Probe Pack</td>
<td>IPP3</td>
<td>Includes 3 Intraoperative Probes</td>
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Note: A Dopplex main unit and Adaptor are required to operate your Intraoperative probes.
* The PA8XS adaptor is only compatible with the DMX Digital Doppler range.
Probes are supplied NON-STERILE

Probes may be sterilised using:
- Autoclave at 121°C and 137°C a maximum of 6 cycles or
- Ethylene Oxide (ETO) a maximum of 30 cycles or Steris System 1 a maximum of 30 cycles

For further information please contact our Customer Care Department