

The original Gammaprobe is back!
Surgical Explorer assists surgeons in
quick precise detection during Sentinel
Node Biopsy and in Nuclear Medicine
for the easy identification of
Parathyroid Glands



Wireless Gammaprobe Surgical Explorer

The Explorer carries the most reliable and precise detector ever



DESIGNED AND
MANUFACTURED IN
AUSTRALIA FOR THE
WORLD

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GLOBALSONICS

Research Pty Ltd



Globalsonics Research Pty Ltd recognized across the world for innovative research and design of radiation measurement and detection technology.



For over 40 years, Globalsonics has been specialised in finding solutions to protect personnel and patients from over exposure and contamination of radioactivity.



As a leader in the field, we constantly strive to provide competitive and reliable technology to fulfil the needs of our clients worldwide.



Our Research and Development in delicate areas of interest, ranging from Science, Industry, Defense, and Medicine and last, but not least Vets, without allowing any room for mistakes.



Inclusive some of our technology and solutions are qualified to the highest level of certification such as: MIL - spec with NATO (North Atlantic Treaty Organisation/UN) accreditation.



Globalsonics is also committed to provide a continuing technical support. This includes regular, preventative service at our Radiological Calibration Laboratory.



All equipment and solutions are designed and manufactured in Australia as per:

ISO 9001-2015

ISO 13485-2016

NATO Mil-Spec Certification

ISO ASTM 51939



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Gammaprobe Surgical Explorer

Professor Munoz-Ferrada who pioneered Gammaprobe technology in Australia continues to add his knowledge and expertise in surgery, nuclear medicine, physics, and engineering, helping to take Globalsonics technology to every corner of the world. His commitment has been recognised in Australia and overseas, he has been invited as a speaker and to perform live surgical demonstrations by surgical departments worldwide.

By the end of the 90s, Globalsonics had built the first Gammaprobe including a built-in check source, a directional collimator, micro-processing and software integration. In 2017 we launched the first Bluetooth wireless communication Explorer Gammaprobe with a touchscreen interface. Bluetooth wireless is a short-range wireless.

To achieve excellence in the design of our Gammaprobe Explorer, our research was supported by surgeons, nuclear medicine physicists, technologists, medical scientists and software engineers.

The Gammaprobe Explorer can also be used in Nuclear Medicine for the easy identification of Parathyroid Glands, in the thyroid uptake. The Explorer carries the most reliable and precise detector ever incorporated in a Gammaprobe. The touchscreen user-friendly interface provides invaluable information in real-time to the surgeons.

The Explorer's directional collimator identifies the precise location of the lowest isotope concentrated activities found in the patient's body resulting in sentinel nodes being contaminated with the isotope injected earlier. This makes it possible to easily identify node intra-cavity without the need for high activities.

Applications:

- Surgery for assisting in quick and precise detection during Sentinel Node Biopsy
- Nuclear Medicine for the easy identification of Parathyroid Glands uptake

Gammaprobe Surgical Explorer

best performance

The Explorer works best when the medical team has defined the following parameters:

- The injection time
- The correct colloid
- The correct activity and calculated time of surgery, to the adequate decaying time of the isotope
- Selecting the right patient (EG: T1, T2).
- Determining lymphatic damage from the history of the patient
- Age of the patient.

Gamma Camera System

By adding the Gamma Camera the precision can be increased even further, as surgeons are able to clearly see the nodes in the patient. The Gamma Camera can even identify a node that is too far away from the incision. It can also confirm if all nodes have been found during the procedure.

More Precision
Adding Nucline™



Charger and Sterilisation unit	Includes	Touch Console	Specifications
• For easy charging and sterilisation, we have designed a dedicated stand that also permits the safe storage of the probe • There is no on/off switch or push buttons: The electronics work via gravity and this minimises the possibility of bacteria accumulating or hiding in the casing of the unit	• Gammaprobe Surgical Explorer 7.0" HMI TFT Screen Intelligent display Module with Integrated Resistive Touch Panel • Handled detector: Available in 3 models • Reinforced Carry Case • Isotope Calculation Ruler • Power Adapter for HMI Console • Power Adapter for Probe charging base • Charging base for Probe • 10 sterilized probe covers • Instruction Manual • 12 Month Warranty • Calibration certificate	• CPU: High Speed Embedded ARM 32-bit Microcontroller Platform • Monitor: 7.0" HMI TFT Screen Intelligent Display Module with Integrated Resistive Touch Panel Visual & Numeric • Display Acoustic pulse recognition in CPS • Features: Battery Operated Bluetooth Fanless Wireless • Adapters: Input 100-240 VAC (50-60Hz) • Output 24.0V, 1.0A, 24W • Battery Type: Built-in Sealed Lead Acid 12V • Battery Capacity: 2300mAh Internal 6-Cell • Battery Operating Time: 8 hours continuous (Max)	• Energy Range: 27 keV to 200 keV • Calibrated: Tc-99 = 140keV • Dimensions: - Standard/Angled: 260mm (L) x 12mm (Dia) - Laparoscopic: 430mm (L) x 12mm (Dia) • Sensitivity: Tc-99m, I-125 <i>Co57 @ 3cm from tip with 700cps/ MBq at least - Only for calibration purpose</i> • Detector: CsI (TI) Solid State 6mm Diameter Window 4mm Diameter (Semi-Conductor). • Sample Time: Selectable 1 sec – 1 min • Axial Detection • Side shielding >99% • Construction: SS316 / Tungsten • Weight: Wired 220g / Wireless 350g
There are three detector sizes available: • Standard Explorer Gammaprobe Length: 260mm • Angled Explorer Gammaprobe Length: 260mm • Laparoscopic Probe Length: 430mm Please note: Wireless or wired options are available on request.	Electronics • High Speed Microcontroller • Internal Flash Memory • Bluetooth 2.1 SIG qualified • 2.4GHz transmission signal (IEEE802.15.4) with wireless network functionality • Suppression of background radiation levels • Up to 10 meters range		