# Advanced guidance system for minimally-invasive and robot-assisted surgery

Designed for radio-guided surgical procedures, the sterile, disposable SENSEI® probe quickly expands the field of view and enables the localization of radioactive hotpots in multiple locations

Using next-generation miniaturized sensor technology, the probe measures just over 40mm in length, enabling unprecedented intracavity maneuverability and anatomic access for surgical precision



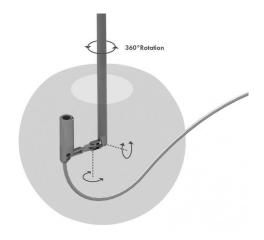


## 'The probe is more versatile and easier to manipulate than a rigid, hand-held probe'.

Prof. Dr. Boris Hadaschik, University Hospital Essen, Germany

#### Unprecedented access

SENSEI® is designed for intracavity use with a standard tissue grasper. The probe is just over 40mm in length, ideal for both manual and robotic minimally-invasive (MIS) procedures. When used with an articulating grasper, this miniature probe allows for unparalleled maneuverability, expanding the field of view and enabling the quick localization of radioactive hotspots in multiple locations. Attached to a 3-metre lightweight cable, the probe can be easily extracted through a standard 12mm entry port.



#### Intended use

SENSEI® is comprised of a tethered probe connected to a mains powered control unit. The system is intended to detect and quantify gamma radiation emitted by a radiopharmaceutical by displaying an audio and graphical display on the control unit. SENSEI® is indicated for external and intraoperative detection of radioactivity in body tissues or organs, where radiopharmaceuticals are administered. A DVI connector enables connection to an external display, for example on a surgical robotic platform.

#### Simple to use and cost effective

The SENSEI® probe is a sterile, single-use probe that doesn't require a sterile sheath or reprocessing between procedures. This eliminates the risk associated with shealth tears and punctures, as well as those associated with inadequate processing. This can also reduce costs associated with probe loss and damage, as well as hospital liability due to crosscontamination.



### **SENSEI®** performance\*

MAX count rate	99,999 CPS
Sensitivity	1200 cps/MBq @ 20 mm
Angular resolution	43 degrees FWHM
Lateral resolution	29mm FWHM at 30mm
Background rejection	>99.95%
Energy window	122.5 KeV - 157.5 KeV

<sup>\*</sup>Performance testing compliant with the NEMA NU 3-2004 standard

#### **Lightpoint Medical**

Founded in 2012, Lightpoint is an innovative surgical tools company. Our mission is to improve the lives of patients by increasing the precision and efficacy of minimally invasive and robot-assisted surgical procedures. We are doing this by designing miniaturized sensing and imaging tools to aid surgeons, improve patient outcomes and reduce healthcare system costs.