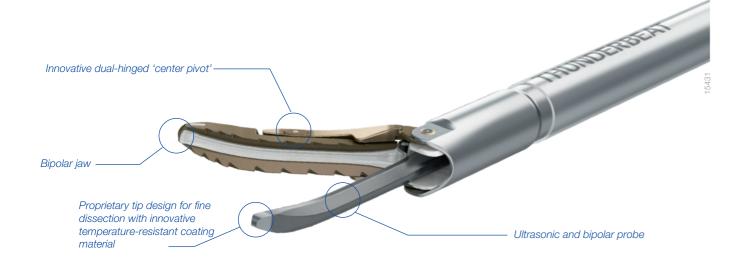


Advanced Energy Solutions THUNDERBEAT | SONICBEAT



THUNDERBEAT Type S

THUNDERBEAT Type S is the world's first and only hybrid energy technology delivering surgical safety and instrument versatility for efficient and streamlined operations with optimal patient outcomes.

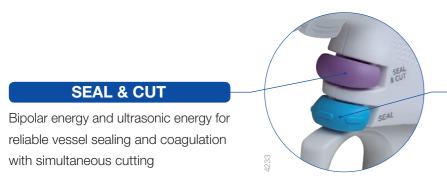


THUNDERBEAT delivers two well-established forms of energy to tissue simultaneously.

- · Ultrasonic energy for superior dissection and fast tissue-cutting capability
- · Advanced bipolar energy for fast and secure hemostasis of vessels up to and including 7 mm in diameter

The unique hybrid technology THUNDERBEAT Type S provides:

- · Reliable 7 mm vessel sealing
- · Superior secondary hemostasis and spot coagulation
- · Fastest-in-class cutting speed
- · Optimal temperature control for reduced thermal spread
- Reduced mist generation
- · Even compression force distribution when grasping tissue

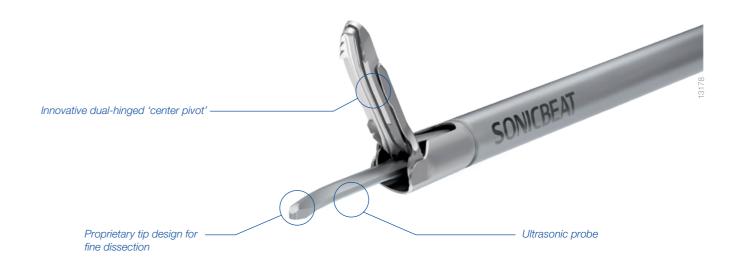


SEAL

Advanced bipolar energy for reliable vessel sealing and tissue coagulation without simultaneous cutting

SONICBEAT

SONICBEAT is based on the design of Olympus' THUNDERBEAT in order to meet our aim of steadily developing ergonomic and multipurpose instruments for open and laparoscopic surgery.



In contrast to THUNDERBEAT, SONICBEAT operates with ultrasonic energy only.

SONICBEAT Provides:

- · Reliable 5 mm vessel sealing
- · Fast tissue cutting
- · Sharp and blunt dissection
- · Even compression force distribution when grasping tissue
- · Reduced mist generation
- · Minimal lateral thermal spread

Surgical Tissue Management System

Both technologies, THUNDERBEAT and SONICBEAT, are driven by the latest Surgical Tissue Management System.

This allows further efficiencies to be achieved through generator standardization across an operating department.



www.olympus.eu/thunderbeat