THUNDERBEAT Front-actuated Grip Type S
Revolutionary Integrated Bipolar and Ultrasonic Surgical Instrument with Enhanced Safety
At Olympus, we are committed to the pursuit of uncompromised safety and reliability. The THUNDERBEAT Front-actuated Grip Type S has been developed with new safety features besides the inherited advantages of its predecessor. Safety is further enhanced by the newly developed Intelligent Tissue Monitoring technology, which uses sophisticated detection technology to control ultrasonic activation. These improvements deliver breakthrough THUNDERBEAT performance that facilitates seamless and efficient surgery.

**THUNDERBEAT Front-actuated Grip Type S**

To meet the requirements of surgeons, the new THUNDERBEAT Front-actuated Grip Type S features a refined jaw, as well as insulation coating on the bottom and lateral surfaces of the probe, further enhancing the advantages of THUNDERBEAT.

**Refined jaw design**
- The shape of the jaw has been redesigned for better alignment between the jaw and the probe, providing reliable durability under certain conditions.
- Refined jaw provides a visual indicator for optimal jaw loading of the tissue.

**Insulation coating**
The bottom and lateral surfaces of the probe are coated with an advanced insulation material for stable sealing during perioperative bleeding management even when the probe is in contact with surrounding tissue / blood.

**Fine tip for precise dissection**
Proprietary tip design supports precise dissection and reduced mist.

**Intelligent Tissue Monitoring**
Intelligent Tissue Monitoring is the world’s first safety assist technology that stops ultrasonic activation to prevent excessive temperature increase. It achieves this using intelligent monitoring technology that detects the small change in ultrasonic impedance that occurs once the tissue has been dissected.

**Reduction of Unintentional Temperature Increase by Intelligent Tissue Monitoring**

**Safety Assist function**
- Minimizes residual heat on the probe that can be caused by ultrasonic over-activation.
- Minimizes PTFE pad wear that can be caused by ultrasonic over-activation.
- The function can be easily turned On/Off.
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Intuitive, Easily Accessible Hand Switches
- Intuitive, easily accessible hand switches from various directions allow for stable activation regardless of hand size or position
- Additional protrusions on "SEAL" button provide tactile recognition for seamless operation flow

ADVANCED BIPOLAR AND ULTRASONIC ENERGY INTEGRATED IN A SINGLE MULTI-FUNCTION DEVICE

The world’s first integrated bipolar and ultrasonic energy device, Olympus’ revolutionary THUNDERBEAT delivers both consistently superior vessel sealing and rapid precision tissue cutting capability in a single versatile instrument.

ADVANCED BIPOLAR AND ULTRASONIC ENERGY INTEGRATED IN A SINGLE MULTI-FUNCTION DEVICE

EVOLVED FOR MORE SAFETY

THUNDERBEAT Front-actuated Grip Type S

Key Improvements of Type S

Easily Assist

Bipolar energy and ultrasonic energy for reliable vessel sealing and coagulation with simultaneous cutting

Seal & Cut

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

Bipolar energy and ultrasonic energy for reliable vessel sealing and coagulation with simultaneous cutting

Seal

Intuitive, Easily Accessible Hand Switches
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ADVANCED BIPOLAR AND ULTRASONIC ENERGY INTEGRATED IN A SINGLE MULTI-FUNCTION DEVICE
## Generators and accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG-400</td>
<td>Electrosurgical generator</td>
</tr>
<tr>
<td>USG-400</td>
<td>Ultrasonic generator</td>
</tr>
<tr>
<td>TC-E400</td>
<td>Energy Cart</td>
</tr>
<tr>
<td>TD-TB400</td>
<td>Transducer for THUNDERBEAT</td>
</tr>
<tr>
<td>MAJ-1870</td>
<td>Footswitch for THUNDERBEAT</td>
</tr>
<tr>
<td>MAJ-1871</td>
<td>Communication cable – short</td>
</tr>
<tr>
<td>MAJ-1872*</td>
<td>Communication cable – long</td>
</tr>
<tr>
<td>MAJ-1873*</td>
<td>Adapter for the connection to UHI-2 or UHI-3 insufflator</td>
</tr>
<tr>
<td>MAJ-1876</td>
<td>Docking fixture</td>
</tr>
</tbody>
</table>

*Required for the automatic mist and smoke evacuation function

## THUNDERBEAT handpieces

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB-0545FCS</td>
<td>THUNDERBEAT 5 mm, 45 cm, Front-actuated Grip Type S</td>
</tr>
<tr>
<td>TB-0535FCS</td>
<td>THUNDERBEAT 5 mm, 35 cm, Front-actuated Grip Type S</td>
</tr>
<tr>
<td>TB-0520FCS</td>
<td>THUNDERBEAT 5 mm, 20 cm, Front-actuated Grip Type S</td>
</tr>
</tbody>
</table>

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Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.