ULTRASOUND BRONCHOFIBERVIDEOSCOPE
BF-UC190F
Enhanced Access and Control
**BF-UC190F — Enhanced Access and Control**

**Allowing Staging and Diagnosis of Even Difficult-to-Reach Lymph Nodes and Lesions**

### Enhanced Access

- **BF-UC180F (previous)**
  - 6.9 mm
- **BF-UC190F**
  - 6.6 mm
- **Unique, Compact Distal Tip**
  - Only 6.6 mm outer diameter and shorter rigid part of 25 mm for improved maneuverability.

### Powerful Angulation

- **Up: 120°**
- **Up: 160°**

Up to 160° angulation supports smoother insertion to the upper/lower lobe bronchi and allows more of a bend in the scope when an EndoTherapy device is inserted in the working channel.

### Easier Intubation and Orientation

The decreased forward oblique viewing angle from 35 degrees to 20 degrees allows for easier EBUS scope insertion. It also enables the operator to keep the endoscopic image in full field of view and assists the anatomic overview.

### Expand Your Possibilities in EBUS-TBNA

Olympus is unique in offering a 19G EBUS-TBNA needle in addition to the 21G, 22G and 25G needles. But now it also provides the second generation of EBUS needles — the ViziShot 2. While the entire portfolio offers the already established safety mechanisms and excellent ultrasound visibility, Olympus provides a needle for every situation — expanding your possibilities in EBUS-TBNA.

- **ViziShot 2 FLEX**
  - Largest EBUS needle with a 19G diameter.
  - Supports histological sampling for suspected sarcoidosis and lymphoma but also helps to provide more tissue for advanced molecular analyses.
  - An ally for special indications but also whenever superior flexibility is needed.

- **ViziShot 2**
  - Smooth needle penetration thanks to sharper needle tip.
  - Better needle control with the new ergonomic handle design.

- **ViziShot**
  - The reliable and long-established EBUS-TBNA needle.

The combination of the thin distal end and wider angulation range greatly enhances maneuverability. This enables easier access to previously difficult-to-reach areas such as 4L and 10R.
Optical System
- Field of view: 80°
- Direction of view: 20° forward oblique
- Depth of field: 2 to 50 mm

Insertion Tube
- Distal end enlarged
  1. Objective lens
  2. Light guide lens
  3. Ultrasound transducer
  4. Balloon channel outlet
  5. Instrument channel outlet
- Distal end outer diameter: 6.6 mm
- Insertion tube outer diameter: 6.3 mm
- Working length: 600 mm

Instrument Channel
- Channel inner diameter: 2.2 mm
- Direction from which EndoTherapy accessories enter and exit the endoscopic image

Ultrasound Functions

<table>
<thead>
<tr>
<th>Model</th>
<th>With EU-ME2</th>
<th>With ProSound F75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Mode</td>
<td>B-mode, Color Flow mode, Power Flow mode</td>
<td>B-mode, M-mode, D-mode, Power Flow mode, Flow mode, eFLOW mode</td>
</tr>
<tr>
<td>Scanning Method</td>
<td>Electronic curved linear array</td>
<td>Electronic curved linear array</td>
</tr>
<tr>
<td>Scanning Direction</td>
<td>Parallel to the insertion direction</td>
<td>Parallel to the insertion direction</td>
</tr>
<tr>
<td>Frequency</td>
<td>5, 6, 7.5, 10, 12 MHz</td>
<td>5, 7.5, 10, 12 MHz</td>
</tr>
<tr>
<td>Scanning Range</td>
<td>65°*</td>
<td>65°*</td>
</tr>
<tr>
<td>Contacting Method</td>
<td>Balloon method*, Direct Contact method</td>
<td>Balloon method*, Direct Contact method</td>
</tr>
</tbody>
</table>

*Balloon MAJ-1351 can be used with the BF-UC190F

Universal Endoscopic Ultrasound Center EU-ME2
The EU-ME2 brings real clarity to your EBUS procedures, supporting better detection and characterization of lesions. A variety of new features such as harmonic echo and elastography help to explore the future of endosonography. In addition, the EU-ME2 provides compatibility with linear endoscopes and radial ultrasound miniature probes.

Ultrasound Cable MAJ-2056
The cable’s detachable design makes the ultrasound endoscope easy to handle, reprocess and store.