FUJINON VIDEO BRONCHOSCOPIES

Designed to improve physician productivity and patient care.

EB-470S
EB-470T
EB-470P

FUJINON

FUJIFILM
Fujinon’s most advanced Video Bronchoscopes are designed for physician productivity and patient care.

Advanced miniature chip technology sets a new standard in high quality images, while allowing substantially more space at the distal end for functional benefits. Insertion is easier, maneuverability enhanced, suction improved, accessory compatibility increased, and accessory passage smoother. As a result, physicians are more productive and patients receive improved care with Fujinon Bronchoscopes.
Fujinon has been an industry leader in endoscopes for more than 30 years and pioneered many of today’s technologies in gastrointestinal endoscopy. In addition to image technology leadership, Fujinon has recently set new standards in functional design that increase physician productivity and improve patient care. Fujinon’s Video Bronchoscopes leverage advanced miniature chip technology to set a new standard in image and function. The result is more efficient and effective procedures for all diagnostic and therapeutic requirements.
Easier Insertion
Fujinon Bronchoscopes incorporate advanced color chip CCD technology in the scope tip to provide brilliant and clear images that enhance procedure efficiency and effectiveness. More importantly, this miniature chip technology has allowed for a 17% reduction in distal end diameters for standard bronchoscopes (EB-470S). With a 4.9mm diameter, the Fujinon EB-470S bronchoscope increases physician productivity by making insertion into the bronchial tubes substantially easier. This thinner diameter is also less demanding on patients during procedures.

Greater Maneuverability
Fujinon’s Bronchoscopes are designed to maximize flexibility throughout the product and thus provide greater maneuverability for the physician. The short rigid section at the distal end has been reduced in length to improve insertion into the Upper Lobe Bronchus and facilitate access to the Peripheral Bronchus. This shortened rigid section also reduces the bending radius which further adds to the maneuverability of the product.

A unique secondary bending section allows for easier insertion into the upper right lobes. This section, located proximal to the traditional bending section, allows for a greater bending radius as the scope is passes forward.
Greater therapeutic access
The new miniature CCD chip in the end of Fujinon’s EB-470T therapeutic bronchoscope provides for increased working area within the traditional 5.9mm outside diameter. As a result, this advanced product offers a generous 2.8mm working channel for improved therapeutic access. In addition, suction capability has been vastly increased for improved procedural performance, especially in cases of bleeding.

Greater accessory compatibility
The generous working channel and a redesigned forceps tube junction increase the range of therapeutic accessories that can be used with the new Fujinon bronchoscopes. Full insulation allows for even more accessory compatibility with electrosurgery and high frequency treatment devices.

Smother accessory passage
Accessory utilization and performance in traditional scopes was often limited by the design of the forceps tube junction. To maximize the range of compatible accessories and improve procedural performance, Fujinon’s new bronchoscopes incorporate a newly designed forceps tube junction. Biopsies, cytology brushings and TBLB’s (Trans Bronchial Lung Biopsy) are significantly easier to perform with these advanced bronchoscopes.

Easier to clean for preventing infection
- Autoclavable suction valve
- Disposable rubber forceps valve
The EB-470S sets a new standard in bronchoscopes with a slimmer distal end while maintaining a generous forceps channel. At the same time, high resolution video image provides clearer and more detailed images than ever before as a result of the advanced, miniature CCD chip built into the scope tip. Insulating polymer materials allow for full compatibility with high frequency treatment devices.

**EB-470S**

<table>
<thead>
<tr>
<th>Viewing direction</th>
<th>Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation range</td>
<td>3 ~ 100mm</td>
</tr>
<tr>
<td>Field of view</td>
<td>120°</td>
</tr>
<tr>
<td>Distal end diameter</td>
<td>4.9mm</td>
</tr>
<tr>
<td>Flexible portion diameter</td>
<td>4.9mm</td>
</tr>
<tr>
<td>Bending capability : UP</td>
<td>180°</td>
</tr>
<tr>
<td>: DOWN</td>
<td>130°</td>
</tr>
<tr>
<td>Forceps channel diameter</td>
<td>2.0mm</td>
</tr>
<tr>
<td>Working length</td>
<td>600mm</td>
</tr>
<tr>
<td>Total length</td>
<td>870mm</td>
</tr>
</tbody>
</table>

The EB-470T establishes a new benchmark in therapeutic bronchoscopes with a generous forceps channel within a slim outside diameter, allowing for greater therapeutic access. Suction performance has been enhanced and the forceps tube junction redesigned to facilitate even the most challenging procedures. Insulating polymer materials allow for full compatibility with high frequency treatment devices.

**EB-470T**

<table>
<thead>
<tr>
<th>Viewing direction</th>
<th>Forward</th>
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</thead>
<tbody>
<tr>
<td>Observation range</td>
<td>3 ~ 100mm</td>
</tr>
<tr>
<td>Field of view</td>
<td>120°</td>
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<tr>
<td>Distal end diameter</td>
<td>5.9mm</td>
</tr>
<tr>
<td>Flexible portion diameter</td>
<td>5.9mm</td>
</tr>
<tr>
<td>Bending capability : UP</td>
<td>180°</td>
</tr>
<tr>
<td>: DOWN</td>
<td>130°</td>
</tr>
<tr>
<td>Forceps channel diameter</td>
<td>2.8mm</td>
</tr>
<tr>
<td>Working length</td>
<td>600mm</td>
</tr>
<tr>
<td>Total length</td>
<td>870mm</td>
</tr>
</tbody>
</table>
Fujinon’s new pediatric bronchoscope, the EB-470P, provides for a new level of small caliber bronchoscopy. An impressive 3.8mm outer diameter, combined with the 1.2mm forceps channel, allows for improved insertion capabilities into the peripheral bronchi. Additionally, as with all Fujinon bronchoscopes, superior imaging capabilities and a wide 120 degree field of view are combined to provide improved visual capabilities.

**Viewing direction**

<table>
<thead>
<tr>
<th>Observation direction</th>
<th>Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of view</td>
<td>120°</td>
</tr>
<tr>
<td>Distal end diameter</td>
<td>3.8mm</td>
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<tr>
<td>Flexible portion diameter</td>
<td>3.5mm</td>
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<td>DOWN</td>
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<tr>
<td>Forceps channel diameter</td>
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<td>Working length</td>
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<td>Total length</td>
<td>870mm</td>
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**Fully Digital Processor & 300 Watt Xenon Light Source Unit**

**EPX-4400**

**Processor VP-4400 Specification**

<table>
<thead>
<tr>
<th>Power</th>
<th>120V 60Hz 0.36A / 230V 50Hz 0.2A</th>
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<tbody>
<tr>
<td>Current consumption (rated)</td>
<td>0.31A / 0.17A</td>
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<tr>
<td>Metering mode</td>
<td>AVE / PEAK</td>
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<tr>
<td>Gain</td>
<td>Normal, +2dB, +4dB, +6dB</td>
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<tr>
<td>Freeze mode</td>
<td>Field / Frame</td>
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<tr>
<td>Image zoom</td>
<td>Electronic Zoom x1 - x2 (0.05 step)</td>
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<tr>
<td>Memory</td>
<td>Patient data: 44 patients / Clinical procedure: 20 types Dr. Name: 20 doctors / Dr. Page: 5 patterns</td>
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<tr>
<td>Digital Outputs</td>
<td>DVI (Digital Visual Interface) : LCD monitor</td>
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<tr>
<td></td>
<td>DV (Digital Video) : Digital Recorder</td>
</tr>
<tr>
<td></td>
<td>USB (Universal Serial Bus) : Output for digital printer</td>
</tr>
<tr>
<td></td>
<td>Ethernet : Network output for PC connection</td>
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<tr>
<td></td>
<td>CF (Compact Flash*) : Output of still images to memory card</td>
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<td>Analog Image Outputs</td>
<td>Composite, RGB, S-Video</td>
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<tr>
<td>Applicable Endoscopes</td>
<td>FUJINON EVE 400 series</td>
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<tr>
<td>Dimensions (W x H x D)</td>
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<tr>
<td>Weight</td>
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**Light Source XL-4400 Specification**

<table>
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<th>Power</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Lamp rated value</td>
<td>Main lamp : 15V300W short-arc Xenon lamp</td>
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<td></td>
<td>Emergency lamp : 12V75W Halogen lamp (SD lamp)</td>
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<tr>
<td>Light control</td>
<td>Automatic light control by CCD image output on CCD (also, available for Manual Operation)</td>
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<tr>
<td>Lamp cooling method</td>
<td>Forced air cooling</td>
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<tr>
<td>Air supply pump</td>
<td>Normal / Low / OFF</td>
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<tr>
<td>Applicable Endoscopes</td>
<td>FUJINON EVE 400 series</td>
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<tr>
<td>Dimensions (W x H x D)</td>
<td>350 x 130 x 420mm</td>
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<td>Weight</td>
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