

## ACHIEVE A NEW PERSPECTIVE

The only HD 3D system with a fully flexible direction of view.



# 3D FROM THE SURGEON'S POINT OF VIEW ENTERS THE SURGICAL FIELD AT LAST

Introducing a new 3D imaging solution that provides depth perception and a precise spatial view of anatomy that cannot be achieved with traditional 2D systems. The Olympus 3D solution is a fusion of advanced 3D technology which overcomes the limitations of conventional 3D systems, providing a new perspective on surgical imaging.

Olympus 3D Imaging Solution provides improved speed, accuracy and precision for surgical tasks while helping to shorten the learning curve.

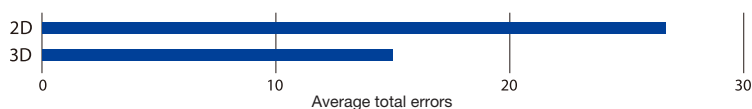
## Improved speed\*

Average time in suturing task



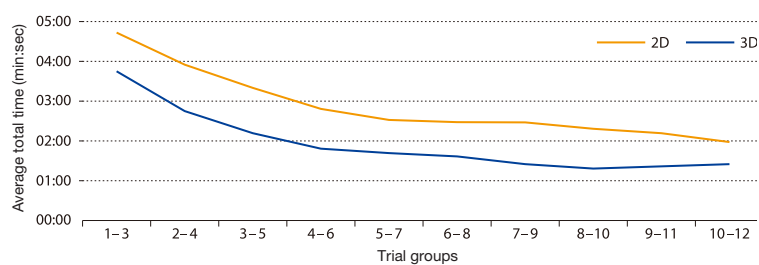
## Greater accuracy and precision\*

Average number of errors in grasping task



## Shorter learning curve\*

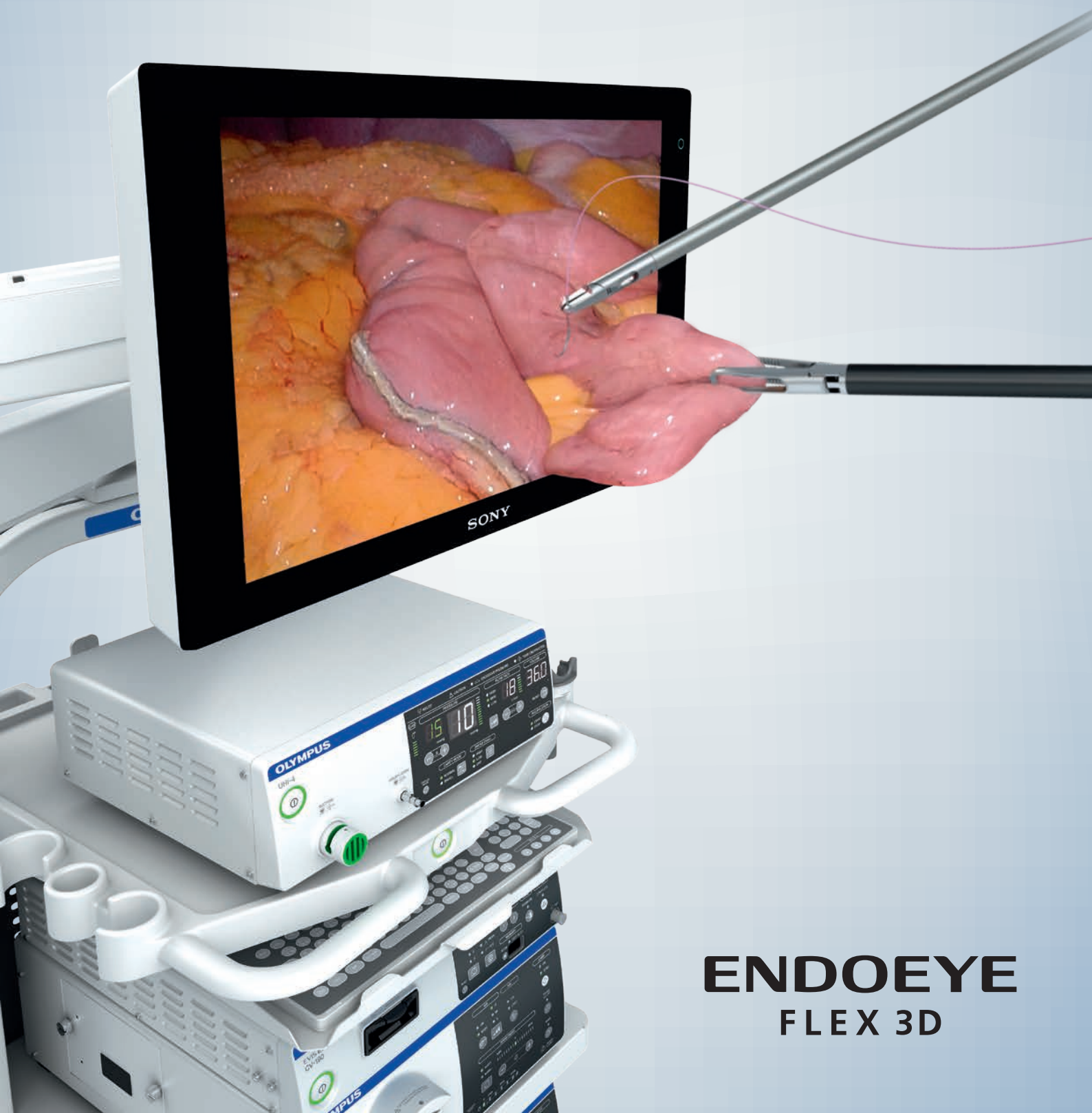
Learning curve in peg transfer task



## How does 3D work?

Humans have two eyes located slightly apart. Each eye sees a slightly different scene, which is processed by the brain and turned into a three-dimensional view. In the same way, the 3D glasses the viewer wears separate the images so that he or she sees a three-dimensional view that cannot be reproduced on a flat, two-dimensional surface.

\*Singer, Marc, et al., 'Evaluation of 3-D Laparoscopy to Complete Surgical Skills Tasks', in '2013 Scientific Session of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) Baltimore, Maryland, USA, 17-20 April 2013', Surgical Endoscopy, 27/1 (2013), 304-503



**ENDO EYE**  
FLEX 3D

# INTRODUCING THE WORLD'S ONLY DEFLECTABLE TIP LAPAROSCOPE DELIVERING HD VIDEO IN 3D

**ENDOEYE FLEX 3D is the only solution that can provide the critical clinical view while maintaining image orientation. A greater depth of field and the optimal amount of depth perception are also realised with the 3D HD image. We are proud to introduce this innovative solution for 3D imaging.**

## **Angulation (100 degrees)**

The ENDOEYE FLEX 3D can bend up to 100 degrees in four directions. This function provides the critical clinical view during surgery while maintaining an optimal and correct visual orientation, which cannot be achieved with conventional rigid telescope and camera head 3D systems.

## **Focus free**

ENDOEYE technology using distally located image sensors maximises the 3D benefit by means of a brighter, more light-sensitive image with greater depth of field while eliminating manual focussing.

## **All-in-one lightweight ergonomic design**

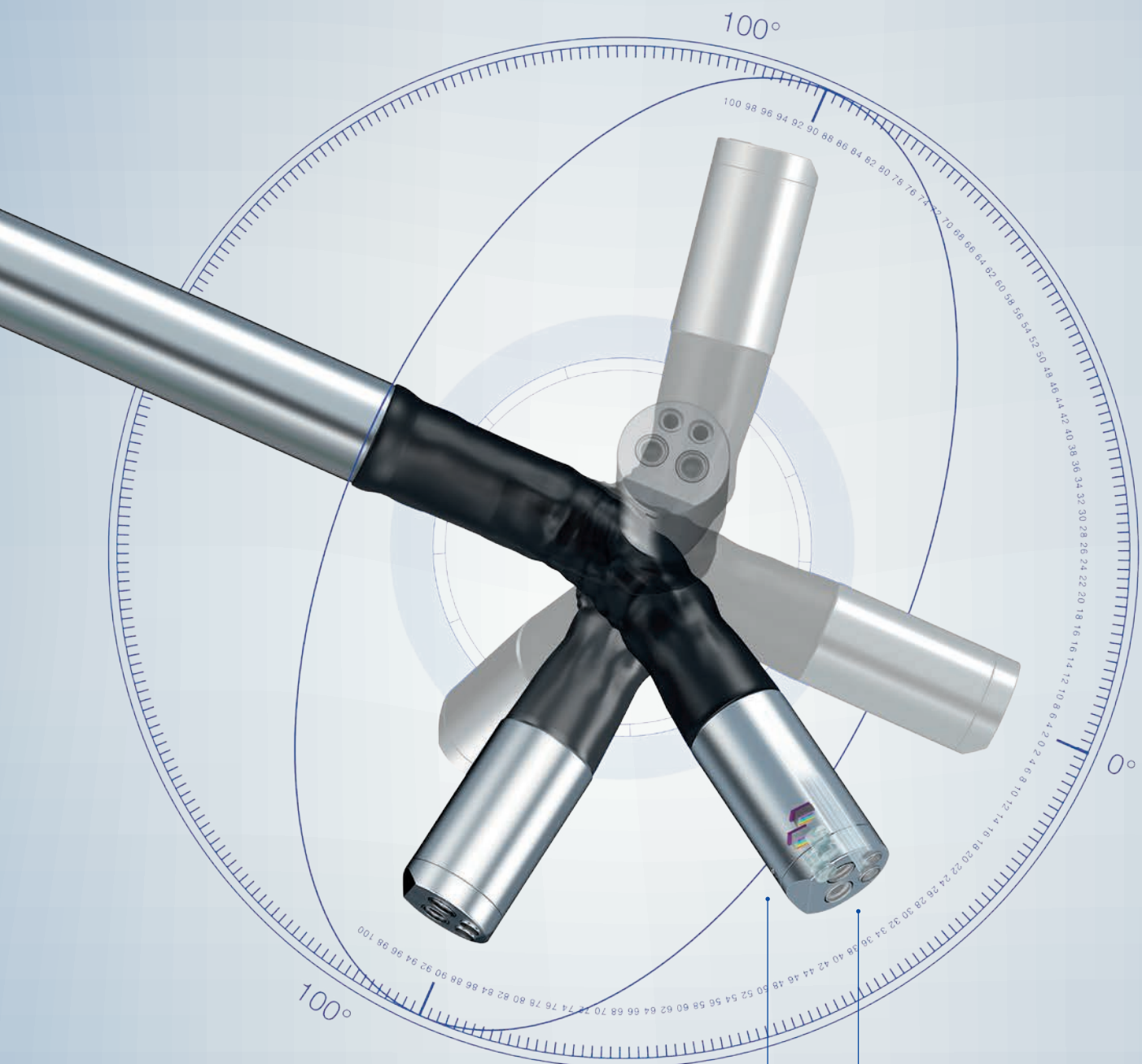
An all-in-one integrated structure is adopted that provides a true 'plug and play' solution. The device can thus be easily set up before surgery, and it also offers improved handling during surgery, even in 3D.



*Angulation*



*Lightweight design*



### 3D in HDTV

The ENDOEYE FLEX 3D utilises high-density image sensors at the distal end of the videoscope providing 3D images in high definition.

### Dual-lens 3D optical structure

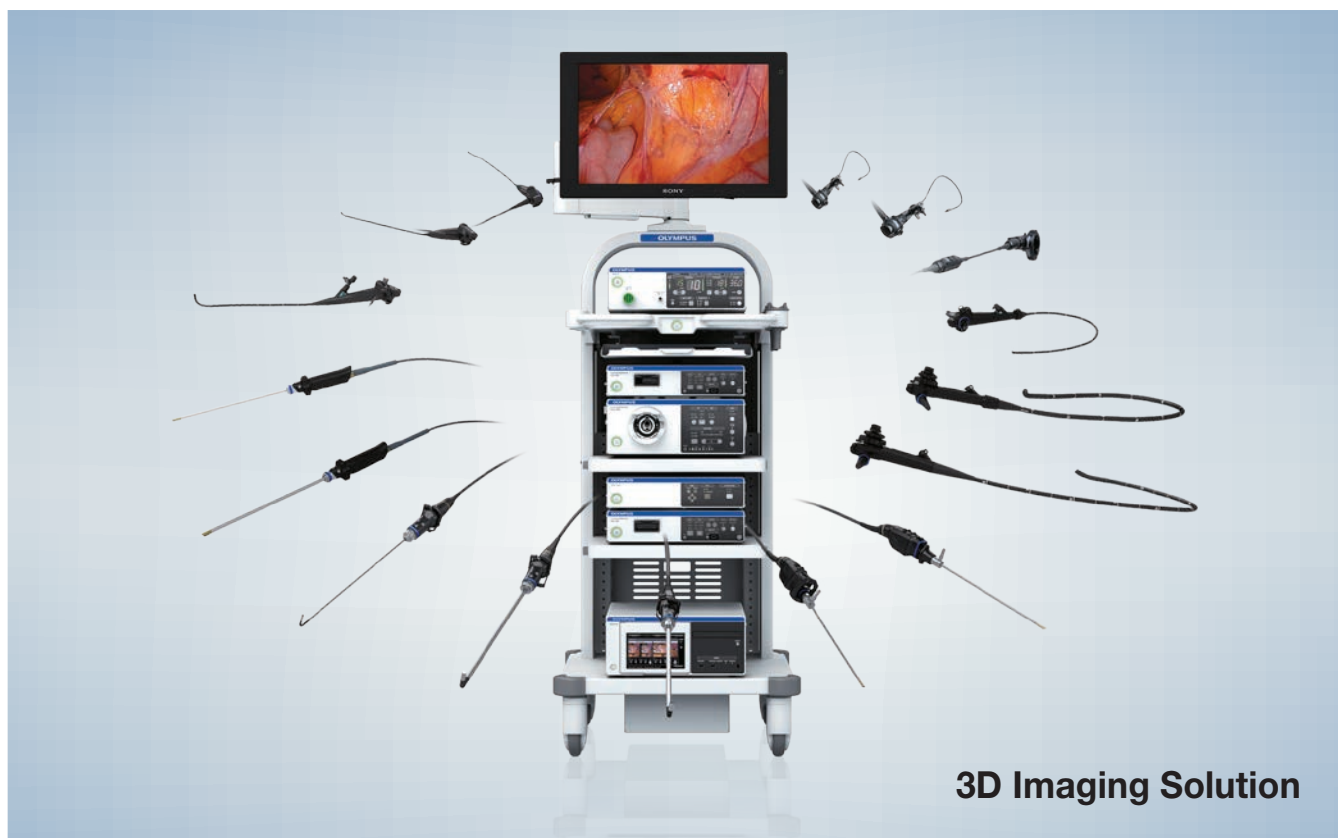
The dual-lens design is the key to creating the correct amount of depth in the image.



# SIMPLY ADD 3D TO YOUR CURRENT SYSTEM TO MAINTAIN FAMILIARITY

## Compatibility with current 2D scopes

Olympus 3D Imaging Solution ensures compatibility with our current 2D scopes to provide an economical means of upgrading your video system with minimal incremental cost. Our video platform supports over 100 different flexible and rigid camera heads, videoscopes and endoscopes.



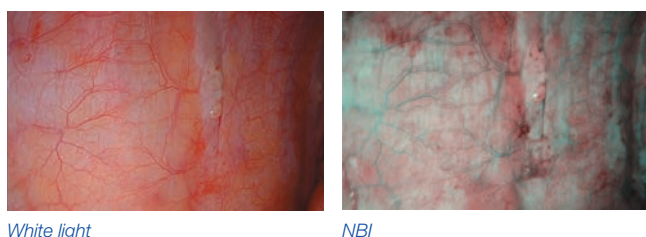
## Simple recording of 3D images in the same way as 2D

The 3D format may be recorded to existing Olympus IMH image management products in much the same way as 2D. Moreover, simultaneous recording of 2D and 3D video signals is possible with IMH-20.



## NBI in 2D/3D

NBI enhances visualisation of the capillary network and is readily available during surgery in both 2D and 3D.



## Easy switching from 2D to 3D

The viewing mode is easily switched back and forth between 2D and 3D.

#### Medical 3D LCD monitor: LMD-2451MT

3D HD medical-grade monitor with lightweight and comfortably designed 3D glasses, supporting various 3D formats. This monitor is optimised for Olympus 3D Imaging Solution.



#### 3D visualisation unit: Olympus 3DV-190

The 3DV-190 integrates the left and right images provided by the two CV-190 system centres and outputs the 3D signal to 3D monitors and recorders in the optimal format.



#### EVIS EXERA III video system centre: CV-190

Two CV-190 video system centres are required to create the left and right signals for the resulting 3D image.



#### EVIS EXERA III xenon light source: CLV-190

The CLV-190 is equipped with specially coated filters for NBI support and auto-adjustment of light intensity for ideal illumination at the surgical site.



#### Image management hub: IMH-10/20

An image management hub with one-touch operation. Amazingly high-quality images with video recording in 2D and 3D. Enhanced recording and management, as well as editing functionality.



#### ENDOALPHA

With ENDOALPHA, Olympus offers visionary control, communication, video management and documentation solutions that integrate the complete range of medical equipment and peripheral systems in the operating and intervention rooms.



# 3D IMAGING SOLUTIONS

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



## **OLYMPUS EUROPA HOLDING GMBH**

Postbox 10 49 08, 20034 Hamburg, Germany  
Wendenstrasse 14-18, 20097 Hamburg, Germany  
Phone: +49 (0)40 237 730, Fax: +49 (0)40 230 761  
[www.olympus-europa.com](http://www.olympus-europa.com)