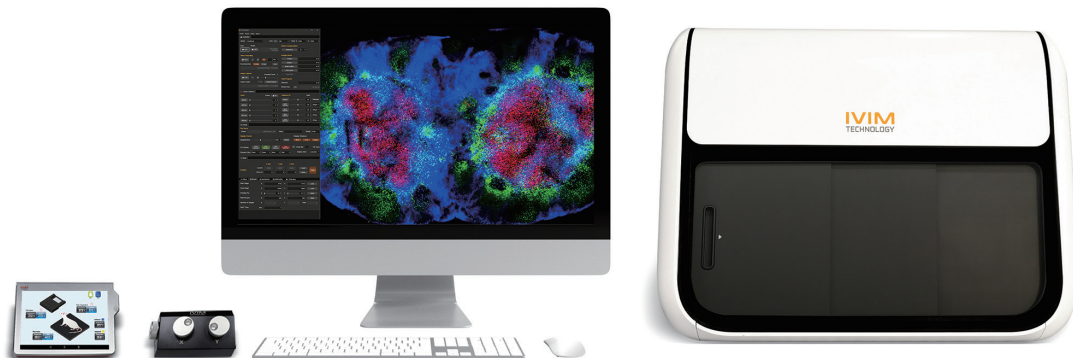


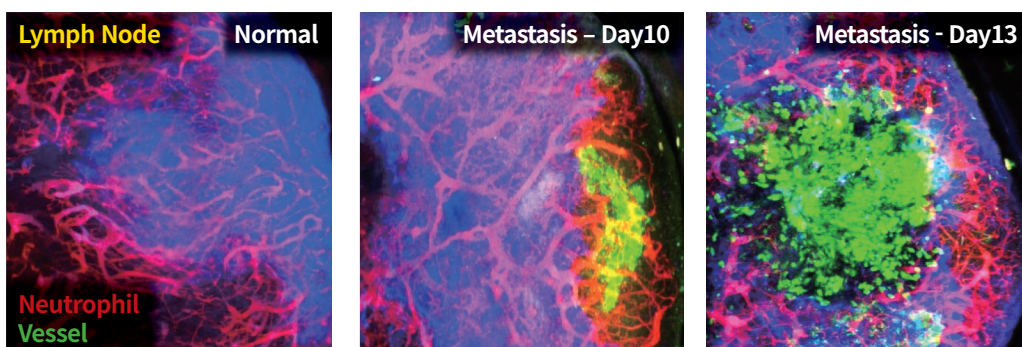
# IVM-C3 (Confocal v. 3)

## The New All-in-One Intravital Imaging Platform



### Tractable, Fast and Gentle

IVM-C3 stands as a remarkably integrated Intravital Microscopy solution designed for *in vivo* imaging. It boasts significantly heightened detection efficiency, optical resolution, and image contrast compared to conventional fluorescence microscopy methods. With a 4-wavelength laser and four high-sensitivity confocal detectors, IVM-C3 facilitates multi-dimensional perspectives of living cells and tissues in both 3D and 4D, supporting up to four different colors. This system proves optimal for concurrently observing diverse dynamic multi-cellular behaviors in small live animal models.



### Key Features

- Simultaneous Multi-Color Imaging (4 channels, 4 different colors)
- Fully Integrated *In Vivo* Maintenance Unit / Animal Stage (e.g., Monitoring & Homeostatic Regulation of Animal Vitality)
- Ultra High-Speed Imaging (max. 50 fps - 512 x 512 pixels)
- 4D Animal Motion Compensation (XYZ & Time)

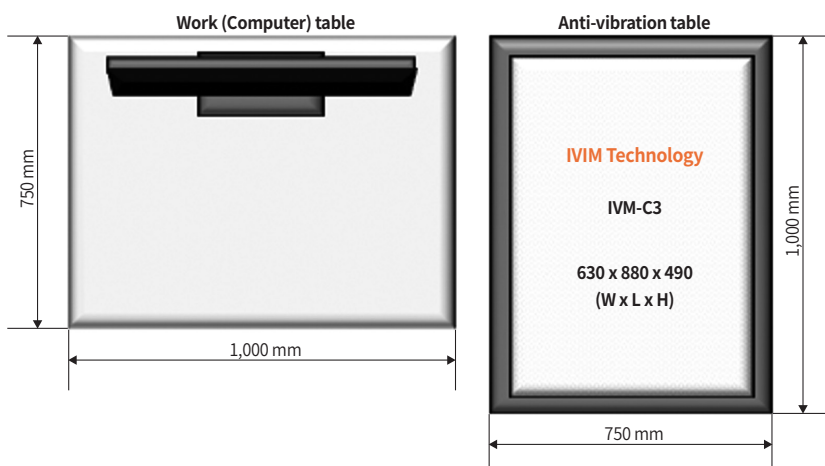
# IVM-C3 (Confocal v. 3)

## The New All-in-One Intravital Imaging Platform

### SPECIFICATIONS

<b>Laser</b>	<b>Confocal Laser Unit</b>	• 405 nm (20mW), 488 nm (20mW), 561 nm (20mW), 640 nm (20mW)
<b>Fluorescence Detector</b>	<b>Confocal Detector</b>	• Wavelength: 450 - 750 nm (DAPI, CFP, GFP, YFP, RFP, Cy5, Cy5.5, etc.) • 4 Ultra-broadband high SNR PMTs (UV to Near IR, Ultra High Sensitivity, Low Dark Current) • Single master pinhole
	<b>Emission Filter</b>	• Individual filter can be mounted on each of four detectors
<b>Scan Head</b>	<b>Scanner</b>	• Polygonal mirror (Fast axis scanning, Max. 66 kHz) • Galvano scanner (Slow axis scanning, Max. 200 $\mu$ s/step)
<b>Imaging Head</b>	<b>Objectives</b>	• Max. 5 objectives are mountable on IVM Engine Software controlled motorized turret (1X - 100X) • Compatible for commercial objectives
<b>Image</b>	<b>FOV</b>	• 100 x 100 $\mu$ m <sup>2</sup> - 10 x 10 mm <sup>2</sup>
	<b>Pixel Resolution</b>	• Max. 2,048 x 2,048 pixels
	<b>Imaging Speed</b>	• Standard: 30 fps @ 512 x 512 pixels • (Optional) High Speed: 50 fps @ 512 x 512 pixels
<b>Animal / Sample Stage</b>	<b>Movable Stage</b>	• Travel Range: 50,000 x 50,000 x 75,000 $\mu$ m (XYZ) • Micromanipulation (Max. 0.2 $\mu$ m resolution) • 3-axis independent control with Jog Dial & IVM Engine software
	<b>Specimen Holder</b>	• Flexible-design universal <i>in vivo</i> / <i>ex vivo</i> / <i>in vitro</i> specimen holders can be mounted. • (Optional) Homeothermic warming system, Holders for window chamber
	<b>Monitoring Camera</b>	• Real-time live animal / sample monitoring
	<b>LED Light</b>	• Installed inside the machine to assist in the observation of live animals or samples
<b>Animal Motion Compensation (Tissue stabilization)</b>	<b>4D <i>In vivo</i> Imaging Motion Compensation</b>	• XY motion compensation: Averaged image acquisition with motion artifact compensation • Z motion compensation: Image-based sample Z position adjustment for long-term intravital microscopic imaging & sample tracking (Feedback-loop automatic stage control) • T motion compensation: Image-based image XY position adjustment for long-term intravital microscopic imaging & sample tracking (Feedback-loop automatic stage control) • Combination of above three compensations for 4D <i>in vivo</i> motion compensation • Controllable by IVM Engine software
<b>Accessories Add-on</b>	<b>Live Animal Maintenance Unit</b>	• Body Temp. Monitoring & Feedback Heater Control, including tablet PC. • 4CH Rectal Probe, Body Plate Heater, Thermometer Sensor & Cover Glass Heater
	<b><i>In vivo</i> Imaging Chamber Sets</b>	• Dorsal Skinfold Chamber • Lung Imaging Chamber • Cranial Window Imaging • Abdominal Imaging Window • Pancreas Imaging Window • Mammary Imaging Window • Heart Imaging Chamber • Uterus Imaging Chamber
	<b>Inhalation Anesthesia System</b>	• Whole Rodent Animal Inhalation Anesthesia System • Anesthesia Mask and Connections for Longitudinal Imaging
	<b>Antibodies / Dyes</b>	• Fluorescent labeling agents, vascular dyes and conjugated antibodies
<b>Engine &amp; Studio Software</b>	<b>Image Display</b>	• Independent 4 single channel display (RGBA channel) • Overlay channel display (Selection among RGBA channel)
	<b><i>In vivo</i> Imaging Modes</b>	• Mosaic imaging (XY), Z-stack imaging (Z), Time-lapse imaging (T) • Time-lapse imaging at Multi-position (T - M) • Time-lapse & Z-stack imaging (TZ) • Time-lapse & Z-stack imaging at Multi-position (TZ - M)

### New All-in-One IVM Series Size Information



**IVM Technology, Inc.**  
**Webpage** [www.ivimtech.com](http://www.ivimtech.com)  
**Contact** [information@ivimtech.com](mailto:information@ivimtech.com)  
**TEL** +82-2-431-7450  
**FAX** +82-2-3400-0450



**AXT PTY LTD**  
 Authorised Distributor  
 IVM Technology  
 Australia & New Zealand

1/3 Vuko Place  
 Warriewood  
 NSW 2102 Australia

+61 (0)2 9450 1359  
[axt.com.au](http://axt.com.au)  
[info@axt.com.au](mailto:info@axt.com.au)