



APPLIED SCIENTIFIC  
INSTRUMENTATION

# Rapid Automated Modular Microscope (RAMM) System

## Modular Design for Rapid Automation Development

- Featuring automated high-speed XY stages, precision piezo & motorized Z focusing, and a wide range of scanning options
- Configurable with infinity-corrected optics, dichroic filter cubes, multi-wavelength excitation and emission filterwheels, shutters, and detectors including cameras and photomultipliers
- Auto-focus, focus stabilization, tracker, and robotic specimen loader available
- Arrangement provides a solid platform for high throughput screening, genetic sequencing, experimental research, and much more
- Designed for flexible cost-effective OEM development using high quality high MTBF components to reduce cost and increase customer satisfaction



## Specifications for Standard Configuration

<b>XY stage range of travel</b>	Full XY stage range of travel (zero obstruction)
<b>Linear translation range of travel</b>	At least 50 mm
<b>Resolution (rotary encoder step)</b>	0.022µm
<b>RMS repeatability</b>	< 0.7µm
<b>Maximum velocity</b>	7 mm/sec

\*Shown with 6.35 mm pitch Lead Screw

## Lead Screw Options

Lead Screw Pitch Options	Rotary Encoder Resolution	Maximum Speed
25.40 mm (Ultra-coarse)	88 nm	28 mm/sec
12.70 mm (Super-coarse)	44 nm	14 mm/sec
6.35 mm (Standard)	22 nm	7 mm/sec
1.57 mm (Fine)	5.5 nm	1.75 mm/sec

Optional Linear Encoders: = Resolution 10 nm, Accuracy = ±3 µm per length of scale