

Precision Measuring Systems

Redefining Metrology



True Resolution 5-Axis Systems

- The possibilities are limited by your imagination
- The True-Resolution Vision System (1.4-1.8um pixel resolution).
- 360 degree view of the component
- Top and side views.
- Automated Cutting Tool Parameters
- · Detailed, rational, Ball Nose Analysis
- 5-Axis CNC Vision System

- Automated Cylindrical Cutting Tool Inspection
- Upto 200 mm diameter and 300 mm Length
- Standard Geometric Measurement Software
- Customised Reports in Excel
- Easy Part Programming- 3D Scanning & Contour Tracing

Proudly made in India by:



82B Electronics City, Bangalore 560 100 India Ph: +91-80-2852 2858

Mobile: +91-98800-22400

Email: look@rapidi.in Web: www.rapidi.in

Technical Specifications

Optics and Video															
Video Resolution	800	800 X 600													
Optical System	em 6X Precision motorised Zoom														
Objective Lens	1X (Zoomed Out)			1X (Zoomed In)			2X			5X			10X		
		WD	FoV		WD	D FoV	x	WD	FoV	x	WD	FoV	х	WD	FoV
	Х	(mm)	(mm)	Х	(mm)	(mm)		(mm)	(mm)		(mm)	(mm)		(mm)	(mm)
Option 1:	11	90	19X14	67	90	2.8X2.2	134	33	1.4X1.1	165	33	1.2X0.9	327	33	0.6X0.45
Option 2:	22	90	9.5X7	134	90	1.4X1.1	268	33	0.5X0.55	330	33	0.6X0.45	650	33	0.3X0.225
		Option		Optional			Optional			Essential			Essential		
Co-Axial Lighting	Magnifications are on a standard 22" LED Moniter. Working Distance (WD) and Field of View (FoV) at various magnifications are mentioned alongside.														

Lighting, Motion Control & Accuracy						
Lighting	4-Zone Surface, Wide-Angle and 20-Zone Wide Angle Fixed Surface illumination; Co-Axial Lighting; Collimated Profile Lighting					
Measuring Travel (mm)	200 X 150 X 300					
Job Weight(On Glass/ On Work-Stage)	50 Kg (Including weight of holder)					
Rotary Axis	1.9" Resolution; ISO 50/40 Taper Spindle Available					
Linear Scale	0.5 um non-contact tape encoders (Higher Resolution on Order)					
Motion Control	Continuously variable analog joystick for axis control Fully-automated CNC with Auto-Focus					
Accuracy	$(3 + L/100) \mu m (L in mm)$					

Software Features						
Cross Hair	Fixed, Flexible, Scan, FrameGrab (Automated Edge Detection), Touch Probe, Multi-scan with Focus					
	Standard Shapes	Point, Line, Circle, Arc, Plane, Sphere, Cylinder, Cone				
Geometric Tools	Virtual Shapes	Mid-Point, Parallel/Perpendicular lines, Angle bisectors, Tangents, Circles with centre,				
	Standard	Parallel arcs, Pin-over dia, Nearest/Farthest points, Cloud points etc.				
	Measurements	Distance (point-point, point-line, point-circle, line-circle, circle-circle), Angle, Radius, Diameter (2D & 3D available)				
	Advanced Measurements	PCD, Thread, Depth, Projections, 3D tools.				
	Cutting Tool Module	Cutting Diameter, Step Length, Runouts, Core Diameter, Ball Nose Analysis, Taper Angle etc.				
	Blade Measurements	Aerofoil thickness, Profile, Fir-Tree & Shroud Details				
DRO	Standard on-screen with Reset; User Coordinate Systems; polar Coordinates					
Graphics	Graphics-on-Video (real-time overlay), CAD (import/edit/export .dxf), Digital Micrometer (onscreen), FasTrace, Digital protractor, Fixed, Text.					
Reports	Direct Reports in MS Excel with conditional formatting; Graphical Reports plus overlay on component image; Point-					
	cloud files in DXF and delimited Text formats					

^{*}Customised attachments, including jigs & fixtures for your components can be developed for the Rapid-I System

Customised Technologies specialises in custom designing and manufacturing multi-engineering speciality products and solutions. Strong emphasis on creative thinking and R&D enable us to develop new products and upgrade existing ones to meet customer requirements at a rapid pace. The specifications provided in this brochure are only indicative and our speed of innovation results in constant improvements in the features available.



Rapid-I won the TDB-DSIR Award for "Successful Commercialisation of Indigenous Technology" from the former President of India, **Dr. APJ Abdul Kalam,** in the presence of Sri Prithviraj Chavan, Minister of Science & Technology, Govt. of India.