



**COBRA**  
Laser Profile Scanner

Cobra™ 2D|3D

- **Accurate surface profiles –** Cobra™ provides accurate surface height information as its low-power laser scans over a surface
- **Selectable laser sensors –** Available DRS™ lasers offer a range of resolutions and standoff distances to satisfy a variety of applications
- **Two available models –** Cobra 2D measures surface height while scanning along its Y axis, and Cobra 3D measures surface height while scanning in its X and Y axes

Maximum scan length (mm)		
	X	Y
Cobra 2D	—	50
Cobra 3D	100	50

## Laser Profile Scanner



Cobra 2D with optional video camera and LCD video monitor (PC not included)



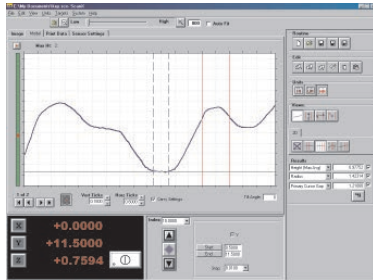
Cobra 3D, mounted on granite base (included)

## Measurement Software

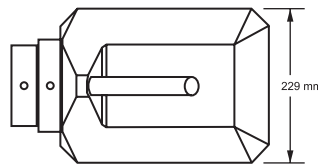
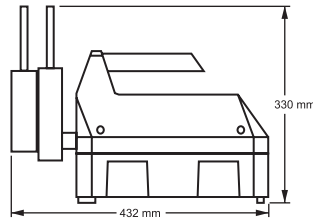
- Scan-X®

## Optional Measurement Software

- E-SPC
- MeasureFit®
- Scan-X offline

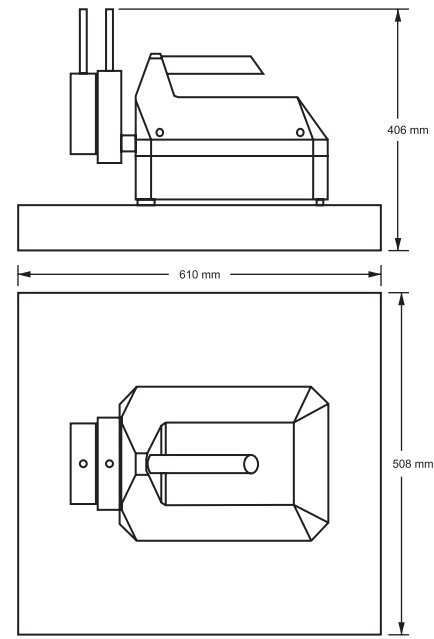


Scan-X



Cobra 2D

# Cobra™ 2D|3D



Cobra 3D



## Safety Considerations

This system is classified as a Class II laser device by IEC 825 (2001). **Do not stare directly into the laser source.**

System Weight, Cobra 2D: 10.5 kg  
System Weight, Cobra 3D: 80 kg

Scan length, Cobra 2D	X-axis NA, Y-axis 50 mm		
Scan length, Cobra 3D	X-axis 100 mm, Y-axis 50 mm		
Z-axis adjustment range, Cobra 2D/3D	50 mm		
Min X and/or Y step size	1.0 µm		
Data range	Up to 1000 points per second (user configured)		
Max points per scan	20,000 (user configured)		
Straightness of travel	± 1.0 µm within 25 mm		
DRS sensors (one included)	<b>DRS-300</b>	<b>DRS-500</b>	<b>DRS-500B</b>
Type of surface	Any	Any	Any <sup>4</sup>
Capture range <sup>1</sup>	300 µm	500 µm	500 µm
Z accuracy within capture range <sup>2</sup>	1.0 µm	1.0 µm	1.0 µm
Dynamic resolution	0.125 µm	0.125 µm	0.125 µm
Standoff distance <sup>3</sup>	17 mm	17 mm	17 mm
Triangulation angle	70°	70°	70°
Spot size (nominal)	7-12 µm	16-23 µm	13-20 µm
Computer option	Windows®-compatible PC		
Standard metrology software	Scan-X®		
Optional software	E-SPC, MeasureFit®, Scan-X offline		
Optional hardware	Video camera, granite surface plate (standard on 3D model), manual positioning system, steel weldment base, calibration kit		
Rated environment	Temperature 18-22° C, stable to ±1° C; 30-80% humidity; vibration <0.002g below 15 Hz		
Operating environment, safe operation	15-30° C		
Power requirements	115/230 vac, 50/60 Hz, 1 phase, 400 W		
Notes:	<sup>1</sup> Capture range is surface dependent. <sup>2</sup> Accuracy on horizontal specular surface within the measuring range. <sup>3</sup> Standoff distance is the distance in Z from the lowest point on the DRS laser to the middle of the capture range. <sup>4</sup> DRS-500B blue laser is appropriate for any surface, but works best on transparent or white parts.		



Confidence. When Results Matter.™

Optical Gaging Products, a division of Quality Vision International  
850 Hudson Avenue • Rochester, NY 14621 • USA  
Phone: (585) 544-0400 • (800) 647-4243 • Fax: (585) 544-8092  
info@ogpnet.com  
www.ogpnet.com