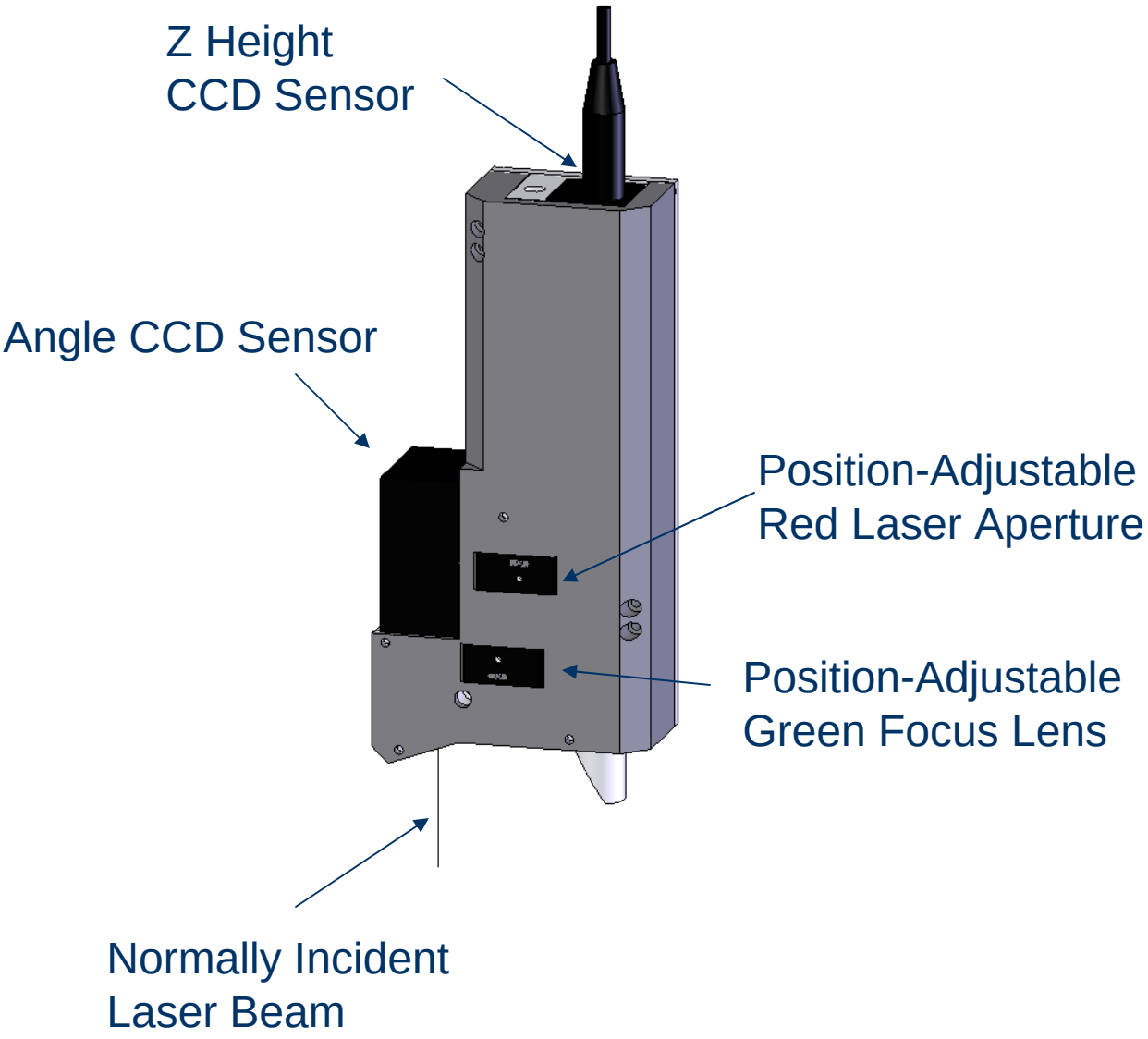
SAZ V9.0
Dual Wavelength Static Attitude Measurement Probe

June 2006

SAZ V9.0 Overview

- Independent Angle and Z lasers
  - eliminates unwanted tradeoffs
  - User selectable angle spot size
  - Spots are easily positioned relative to one another
- Lasers are normally incident to substrate
- Improved Signal / Noise for Angle measurement
- Direct replacement for the AKI V6 Probes

SAZ V9.0 Features



Preliminary Performance Specifications

	PSA	RSA	Z Height
Sensor Technology	½" CCD		½" CCD
Laser Wavelength / Power	635 nm / < 1mW		532 nm / 1mW
Measurement Range[1]	9.6°	7.2°	±2mm
Resolution (n=1)	0.0003°		0.10 µm
Resolution (n=5)	NA		0.06 µm
RMS Repeatability	0.0003°		0.10 µm
Linearity[4]	1.5% / 4° range		TBD
Spot Size[2]	0.1-1mm		~50µm
Measurement Speed[3]	35 msec		35 msec

1. Actual usable measurement range. Sensor range is 10% larger.
2. User selectable aperture for angle measurement laser.
3. PSA / RSA measurements are simultaneous. HS (High Speed) option available to simultaneously acquire PSA, RSA, and Z-height.
4. Uncompensated linearity. LUT or Empirical compensation can reduce angular linearity to < 0.50%.

V9 Mounting Diagram