



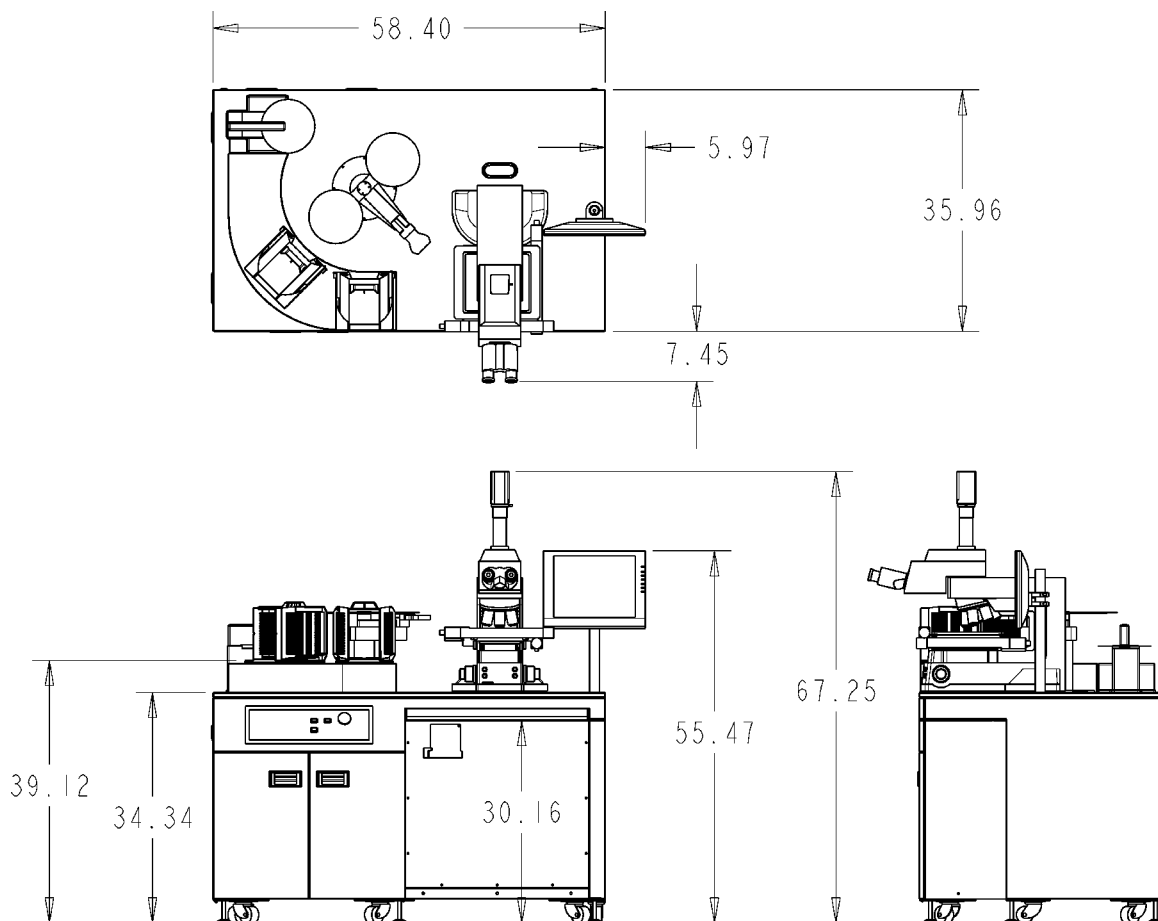
## IRIS INSPECTION STATION

### Description:

IRIS is an ergonomically designed visual inspection system capable of all optical techniques allowing for safe inspection of virtually any substrate. Incorporating the latest technology in robotic handling, the IRIS boasts stainless steel construction, to meet your class 100 clean room requirements.

## Features:

- NT based operating system
- Programmable inspection recipes with infinite sites and number of recipes with random sampling features
- Image archiving with annotation saved in TIFF
- Realtime imaging on flat panel display and/or video monitor
- Mirrored hard drive for reliable data storage
- Programmable 8" x 8" stage
- Safe robotic handling-no edge contact
- Dual end-effector robot for high thru-put
- Various substrate shapes, thickness and materials
- Pre-alignment for 3" - 8" substrates, notch or flat alignment
- Multiple cassettes-accept, reject (rework)
- Substrate size changeable with no operator input
- Class 1 laser scanner allows for quick and safe cassette mapping
- 10 minutes 28 seconds thru-put for 25 6" wafers, 5 sites per wafer with 1 second dwell per site
- Optical techniques include: brightfield, darkfield, DIC, and confocal
- Magnification to 2,000X, .18 micron line/space resolution with confocal option
- Built to SEMI S2 and S8 specifications



## Specifications:

Power requirements:	110 V A/C, 60 Hz, 15 Amp
Vacuum Supply:	20 - 24 inch of Mercury
Software:	Capable of controlling X-Y Stage, Autofocus, Robot Controller, Cassette Platform Switches, Stage Vacuum Sensor, and Stage Solenoid Valve. Video Camera will provide Image in "Video Window".
Operating System:	Windows Based
Safety Features:	EMO Switch (Emergency power off), 15 Amp Circuit Breaker capable to 10,000 Amp surge
Computer:	Personal Computer (PC) based
Monitor:	14.1 inch LCD flat panel (larger upon request)
Keyboard:	P/S 2 style
Mouse:	P/S 2 style
Video Camera:	High Resolution 3 CCD Color Camera
Stage:	8" X-Y travel
Joystick:	3" handle, 2 buttons, High - Low Speed
Stage Controller:	X axis, Y axis, Nosepiece Control
Stage Vacuum Chuck:	2.5" Diameter Vacuum Chuck
Microscope:	5X, 10X, 20X, 50X ELWD, and 100X ELWD Objectives (multiple options upon request)
Robot Handling System:	Dual End-Effectors, Articulated Arm
Laser Scanner:	Class 1 laser providing quick scanning of cassettes, capable of detecting substrates, misaligned substrates and missing substrates.
Pre-aligner:	High Resolution Pre-aligner, Flat and Notch finding
Auto-Focus:	Optional
Cassette Platforms:	2 Platforms, each will accept 3" to 8" round or square, notch/flat finding, independent Cassette Switches
Loading Time:	Less then 20 seconds (Cassette holder to Stage Chuck)
Point to Point:	Less then 3 seconds (within Substrate)
Unloading Time:	Less then 20 seconds (Stage Chuck to Cassette holder)
Transfer Time:	Less then 10 seconds (swap Substrate from Stage Chuck to R1 or R2 End Effector)
Scanning Time:	Less then 3 seconds per cassette
Working Surface:	Stainless Steel, 300 series
Weight:	750 pounds
Size:	67.0" height, 58.4" width 36.0" depth
Leveling Capacity:	1"

# ***Micro Optics SEG***

*Semiconductor Equipment Group*

68-23 Fresh Meadow Lane  
Fresh Meadows NY, 11365

Phone: (718) 961-8833  
Fax: (718) 461-2904  
Contact: Philip Weissman