nSpec® PS
Automated Optical Inspection System

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Whatever the user's specific sample inspection requirements, Nanotronics provides a wide range of solutions for obtaining rapid results.

nSpec® PS is the ideal system for a research and development or production setting. It runs multiple scans sequentially. User-friendly software makes configuring recipes next to effortless. And, as needs evolve, recipes are easily saved and modifiable.

Fully automated inspection for:
· Substrate, epi, and patterned wafers
· Transparent and opaque wafers
· Diced wafers on film tape, trays, gel-pak or waffle packs
· Photomasks
· Sample fragments

Features:
· Automatic wafer loader
· Multiple resolution settings
· Rapid scanning
· Customizable defect reports
· Settings for single image capture and scans
· Variety of sample chucks to meet specific needs
· Robust analysis for defect or feature of interest detection and classification

SYSTEM
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Weight	363 kg
Dimensions (W x D x H)	236 cm x 157 cm x 194 cm
Min. Vacuum Requirement	-21 in. Hg (-70 kPa)
Power Supply (UPS included)	120VAC, 30A, 50-60Hz / 208VAC, 15A, 50-60Hz

OPTICS
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Illumination Modes	Brightfield, Darkfield, DIC (Nomarski)
Light Source	White light LED (other options available)
Objectives	5x included, 1.25, 2.5, 10, 20, or 50x, user selectable (5 position turret)

STAGE
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Travel, typical	200 mm X and Y direction
Positioning	Linear servo motors with closed loop encoders (50 nm resolution)
Repeatability	+/- 0.5 µm
Travel Flatness	30 µm
Construction	Precision ground raceways and crossed roller bearings
Limit Switches	Optical, non-adjustable
Mounting Platform	Microscope/heavy duty pedestal
Centered Load Capacity	2.27 kg
Weight	11.33 kg
Size (W x D x H)	35 cm x 37 cm x 4 cm

WAFER LOADER
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Runs 1 Cassette at a Time	25 wafers/cassette, Standard H-Bar Cassette
Standard Wafer Sizes	50, 75, 100, 125, 150, or 200 mm
Wafer Alignment	Automatic by notch or flat
Dimension (W x D x H)	71 cm x 75 cm x 35 cm (Loader 79 cm)
Weight	54 kg

OPTIONS
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AFM	Specs available upon request
SECS/GEM	
OCR	Top-Mount, Bottom-Mount, Or Both
Transmitted Light	