

# **KLA TENCOR 2835**

## **Patterned Defect Inspection System**

### **Introduction**

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## General

The new 2835 Series bright field inspection platform introduces Power Broadband, a unique high-brightness light source designed to enable more repeatable capture of difficult defects, faster operation, and better discrimination between defects of interest and nuisance defects. Also equipped with a new image acquisition system featuring twice the data rate of its 2810 Series predecessor, the 2835 Series offers its markedly increased capability at production speeds

## Configuration

No.	Description	Component
1	User Interface	Monitor
		Workstation

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		Keyboard / Trackball / Joystick
		etc.
2	Main Unit	Inspection station
		X-Y stage
		Optic system
		etc.
3	Handler	Robot
		Pre-aligner
		Arm
		etc.
4	Aux Racket	1 set
5	External Blower	1 set
6	Power Line Conditioner	1 set

## Specification

General			
Wafer size	200/300mm(8/12inch)		
Wavelength illumination	260~450nm		
Wavelength band	Visible, UV, DUV		
Pixel Size	0.08μm / 0.09μm / 0.12μm / 0.16μm / 0.20μm / 0.23μm		
Small Pixel Size	0.050μm / 0.065μm		
Capture Rate	≥90% for production worthy recipes		
Defect Rate	<1.5% for production worthy recipes		
Repeatability	95% for production worthy recipes		
Scan Rate	Pixel Size (um)	Scan Rate (sec/cm2)	
		Array	Random
	0.16	1.05	1.11
	0.20	0.76	0.82
Die Size	1.5mm to 40mm on a side		
Edge Exclusion	3mm		

Care Area Border Limits	X=1.5um,Y=1.5um
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## Working condition

Item	Specification
Electric Power	208 VAC, 3 phase WYE power, 50/60Hz, 30kVA,
Vacuum	Min 25inHg(84.6kPa) 3/8 inch OD tube
CDA	100 PSIG (689kPa) 3/8 inch electropolished stainless steel tube
N2	30~80PSI (206-552kPa) 1/4 inch electropolished stainless steel tube
Temperature	20~25°C, Stability: $\pm 1^{\circ}\text{C}$
Humidity	30%~60%
Cleanroom class	Class 100 or better
Vibration	Less than 12.8 $\mu\text{m/sec RMS}$ , between 0.1 Hz - 1000 Hz