

**SCREEN**

An improved image capture system supports detection of even the smallest defects.

Automatic Optical Inspection System

**PI8300**

*Optical Pattern Inspector*



# Automatic Optical Inspection System PI-8300

## FEATURES

### 1. Improved speed

#### 1) Faster inspection

The PI-8300 uses a better processing method that further increases inspection throughput.

L&S (μm)	40	60	80	120
Side/hour	149	175	198	236

Note: Board size = 560 x 457 mm

#### 2) Faster setup

The main computer's processing speed has been improved. Total setup time is more than 10% faster, as compared with previous models.

### 2. Higher inspection quality

#### 1) Improved image capture

The image capture system has been significantly enhanced. The use of new lighting that enables micro-short imaging and a CCD board with a much higher S/N ratio improve the PI-8300's ability to detect even the smallest defects.

#### 2) Centered display of defects

The PI-8300 features a function that ensures that defects are enlarged and displayed at the center of the screen during defect verification. This results in much higher defect verification efficiency.

\*An optional verify unit VT-1800 or VT-2000 is necessary to use this function.

#### 3) Better DRC inspection function

The DRC inspection function has been enhanced by the addition of a new protrusion inspection function and an annular ring width inspection function.

#### 4) Multi-threshold DRC inspection

To improve the detection of dishdowns and microshorts, the PI-8300 features two DRC inspection circuits. The use of a higher binary threshold level for dishdowns and a lower binary threshold level for microshorts enables simultaneous high-sensitivity inspection for both types of defects.

### 3. Improved operability

#### 1) Automatic inspection setup function

A new function that makes it possible to automatically set the board thickness, binary level, and inspection type (DRC or PMI) has been added. This new function reduces setup time significantly, as compared with previous models.

#### 2) Better inspection area creation function

To improve inspection area creation efficiency, the PI-8300 boasts a new function that makes it possible to create multiple copies of inspection (and non-inspection) areas. A function that makes it possible to expand, contract, and edit master data and enable data has also been added.

#### 3) Package board inspection

This function enables more efficient inspection and verification of multiple-piece boards such as package boards. When the number of defects in any piece or sheet exceeds a set value, this function skips the remaining verification procedure in that area. The result is a significant increase in defect verification efficiency.

## SPECIFICATIONS

<b>Light source</b>	LED light source (615 nm)			
<b>Inspection area</b>		<b>Loadable panel size</b>	<b>Actual inspection area (camera)</b>	<b>On-system verification</b>
	X-direction (max.)	760 mm	674 mm (6 CH)	674 mm
	Y-direction (max.)	800 mm	720 mm (depth)	610 mm
<b>Power requirements</b>	Main unit: 1 φ 200 V to 230 V 1.8kw (9A)		Blower: 1 φ 200V to 230V 3.2kw (16A)	
<b>Dimensions (WxDxH)</b>	1,160 x 2,050 x 1,260 mm			
<b>Weight</b>	880 Kg			
<b>Options</b>	1. Package Inspection 2. Inline autoloader specifications (consultation required for connection specifications) 3. UP-8000 Front-End system (data conversion and setup station) 4. Defect Verification & Repair System VT-2000			

## DAINIPPON SCREEN MFG. CO., LTD.

We reserve the right to alter product design and specifications without prior notice.

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