PCB line width measurement

Precision Line Gage
PLG100

- Measure etch factor
- Reduce measurement time
- Easy to operate
- Excellent repeatability
- Top and bottom line width
- Safe on film
Precision Line Gage
PLG100

PCB line width measurement

Key benefits

• Quickly determines etching factors

• Easily measures top and bottom conductor line widths

• Easily checks the conductor line space and width on the board

• Reduces measuring time and increases measuring accuracy and repeatability

• Easy to operate and requires little training

The 360° light ring ensures operation at any angle
Overview

Traditionally, well-trained inspectors spend a long time with a 50x or 100x magnifier to measure conductor line widths. They are forced to carefully count tiny lines with the magnifier. Operators will have tired eyes after just a short inspection. Different inspectors can easily end up with varying results due to the rigors of examination.

The Precision Line Gage system remedies this situation by providing automatic high quality optical measurements.

Advantages

The Precision Line Gage system is specially designed for desktop use in order to measure conductor line widths, conductor line spaces, arcs, circles and other patterns on the PCB. It can measure a conductor line width less than 1 mil (25 microns). Besides hi-tech imaging, the Precision Line Gage system is unbelievably light weighing only 0.73 kg providing easy mobility. The unique and smooth design of the Precision Line Gage base ensures that your PCB will not be scratched during inspecting. Its special lighting design allows users to measure line widths without considering the angle of conductor lines. And the Precision Line Gage system can provide measuring results in text format. Users can then simply export these results to Microsoft Excel™ to analyze the results in detail.
PLG100 Precision Line Gage

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>145 x 145 x 210 mm (L x W x H)</td>
</tr>
<tr>
<td>Weight (controller excluded)</td>
<td>0.73 kg</td>
</tr>
<tr>
<td>Camera</td>
<td>High resolution array CCD</td>
</tr>
<tr>
<td>Lighting</td>
<td>LED coaxial light and LED side light</td>
</tr>
<tr>
<td>Optical resolution</td>
<td>0.78 µm</td>
</tr>
<tr>
<td>Controller</td>
<td>High performance PC</td>
</tr>
<tr>
<td>Measuring patterns</td>
<td>Line widths, line spacing, arcs, circles, via-hole (optional)</td>
</tr>
<tr>
<td>Operating system</td>
<td>Microsoft Windows 2000 or XP</td>
</tr>
<tr>
<td>Power</td>
<td>AC 110V/220V, 60Hz, 500W</td>
</tr>
<tr>
<td>Optical target</td>
<td>Laser dot</td>
</tr>
</tbody>
</table>

PLG100 Precision line gage is designed and manufactured to Polar specifications by Machvision Inc. www.machvision.com.tw

The information is believed to be true and accurate based on our laboratory testing and experience. Specifications and design are subject to change without notice.

About Polar Instruments

Polar provides innovative and easy to use measurement, test, design tools and utilities for the PCB fabrication industry and related disciplines. Polar is best known for CITS and RITS controlled impedance test systems, and professional impedance calculation tools. Polar also represents PWB Reliability Stress Test Systems in Europe and Asia Pacific. The SB200A PCB Stackup Builder adds to the Polar product range by helping simplify the control and documentation of PCB layer stackups for interconnect designers, fabricators and OEMs.

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