3D VISION INSPECTION

High Productivity
• 100,000 UPH (Based on Dry Run)

Excellent 3D Vision Inspection Technology
• PMP (Phase Measurement Profilometry Technology)

Most Advanced Vision Inspection
• Capable to Handle for BGA, QFN, LEADED Camera Module, TMV & WLP Packages

Package Side Inspection (Optional)
• Enable to Inspect Package Cutting Surface (QFN, QLP, MLP, MLF, LFCSP, Camera Module)
3D VISION INSPECTION

Enhanced Machine Features

- **Latest Innovation in Vision Inspection Technology**
  - True 3D Inspection in PMP Technology
  - 3-Dimensional Mapping Function
  - Best Inspection Accuracy by Actual Volume Scanning on Objects (Not by Brightness Control)
  - Solution for Warpage & Coplanarity Inspection
  - Applicable for Both Top / Bottom Side for 3D Inspection
  - Package Side Module (Optional)

- **High Accuracy & Precise Handling**
  - Package Handling Accuracy : ± 20μm
  - Minimum Package Size : 3x3 or less (Both QFN & BGA in Tray)
  - Minimization for Machine Vibration

- **Machine Flexibility & Quick Change-Over**
  - Various Off-loading Options (Tray, Tube or Tape & Reel)
  - Multi-reject Sorting Function
  - Capability to Handle All Types of Semiconductor Packages
  -Extremely Easy & Quick Change-over : Max. 10 minutes
  - Universal Picker Applied

- **Advanced Operation System (HMI)**
  - Automatic Image Save & Statistic Process Control (SPC)
  - PC Based Easy-to-use & Real-time Graphical User Interface
  - Detail Maintenance Guide on LCD Touch Screen Monitor

- **Productivity and Capability**

<table>
<thead>
<tr>
<th>Productivity</th>
<th>UPH</th>
<th>100,000 (Based on QFN 3x3, 18x30 Tray, 540 Units)</th>
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<tbody>
<tr>
<td>Capability</td>
<td></td>
<td></td>
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<tr>
<td>PKG Handling Acc.</td>
<td>± 20 μm</td>
<td></td>
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<tr>
<td>Min. PKG size</td>
<td>3mm x 3mm</td>
<td></td>
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<tr>
<td>Max. PKG size</td>
<td>50mm x 50mm</td>
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<tr>
<td>Types of Package</td>
<td>Leaded, Leadless, Camera Module, CSP, TMA, WLP</td>
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<tr>
<td>Vision FOV</td>
<td>70mm x 52mm</td>
<td></td>
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<tr>
<td>Performance</td>
<td>MTBA</td>
<td>2 hours</td>
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<tr>
<td></td>
<td>MTBF</td>
<td>168 hours</td>
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<tr>
<td></td>
<td>MTFA</td>
<td>3 minutes</td>
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<tr>
<td></td>
<td>MTTR</td>
<td>30 minutes</td>
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BGA 9mm x 9mm 3D Image
Ball Height : 0.5mm

Good Ball / Dent Ball

Leaded Package

QFN Side Inspection

HANMI Semiconductor

#532-2, Gajwa-Dong, Seo-Gu, Incheon, 404-250, Korea
TEL. +82-32-571-9100  www.hanmisemi.com

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