As semiconductors proliferate and continue to increase in complexity, they are found in an ever-expanding array of state-of-the-art applications, including PCs, digital appliances, mobile devices, and automobiles. To meet the demands of this diverse set of end-user requirements and to keep their products differentiated from the competition, device manufacturers continually pursue new technologies, and there are now over 100 IC package types offered. To this end, with time-to-market a critical measure for success, device manufacturers are seeking ways to get better performance from their equipment, while reducing the production time and labor associated with frequent changes in package types.

Advantest’s M4742A offers an ideal solution, by providing significant advantages in throughput, accuracy, and reliability, including shorter operating times and streamlining of labor.

**Improved Functionality Leads to Higher Productivity**

Improved utilization rates are critical to efficient testing of today’s highly specialized semiconductors, particularly those produced in limited quantities. Meeting this need, the M4742A dynamic test handler offers customers vastly improved operability and higher productivity, and also supports diverse and changing requirements through an expanded set of options. The handler’s improved ergonomic functions which save valuable time when exchanging device-types and socket layouts, help to increase productivity. Its redesigned 15-inch operation panel with new GUI capabilities and an enlarged window to allow the user to look inside the handler, improves visibility, enhances operability and affords ease of maintenance.

Moreover, because of the improved device handling functionality, the number of components in the change kits can be reduced sharply (up to 80%), contributing to an overall reduction in running cost.* (*when used with open-top type IC sockets)

**Enhanced Functions**

A high quality test environment is enabled, optimized and automated by key functions including:

- **Heat Sink Prevention**
  The design of the M4742A prevents heat sink at socket contact and results in improved temperature accuracy at high-temp operation (±3˚C at 125˚C)

- **Automatic IC Socket Cleaning Sequence is available and results in improved yield**

- **6 DUT Parallel Testing**
  Parallel testing in 2x3 layout as well as conventional 1/2/4/8 DUT parallel testing is available

- **High Insertion Force Capability**
  With insertion force improved to 150%, M4742A handler supports testing of high pin-count packages

**M4742A Major Specifications**

<table>
<thead>
<tr>
<th>Target Packages:</th>
<th>BGA, CSP, QFP, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simultaneous Testing:</td>
<td>Up to 8 devices</td>
</tr>
<tr>
<td>Throughput:</td>
<td>6,300 devices per hour (maximum)</td>
</tr>
<tr>
<td>Temperature Range:</td>
<td>Ambient, +50˚C to +150˚C (optional)</td>
</tr>
</tbody>
</table>

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*Please refer to product manual for complete system specifications. Specifications may change without notification.
The photograph includes optional parts.*