The TAS450 is the latest generation of Load Port from TDK, supporting both FOUP and H-MAC. The TAS450 is innovative design, easy set-up, and superior reliability. The TAS450 is a high-performance module that meet your needs for particle-free operation, fast throughput.
**FOUP Load Port**

**TAS450 TYPE : A2**

### Features

1. **SEMI Standard E154**
   MECHANICAL INTERFACE SPECIFICATION
   FOR 450mm LOAD PORT

   With all moving parts, including mapping unit, are installed below the wafer surface, which provides high-level particle-free design.

2. Transmission-type mapping unit optionally available.

3. Obstacle detection sensors on Dock position.

4. FOUP/H-MAC presence / Placement detection.

---

**Supported FOUPS**

450-mm FOUPs compliant with SEMI E154 and E154

**Standard Specifications**

<table>
<thead>
<tr>
<th>Dimension and Weight</th>
<th>Full Height</th>
<th>1,437 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Width</td>
<td>630 mm</td>
</tr>
<tr>
<td></td>
<td>Depth</td>
<td>573 mm (from BOLTS interface surface)</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
<td>115 kg (excluding all options other than mapper)</td>
</tr>
</tbody>
</table>

**Operation Times**

- Without mapping
  - Load: Max. 10sec (FOUP set) / Robot access enable
  - Unload: Max. 10sec (Robot access enable) / FOUP eject enable

- With mapping
  - Load: Max. 15sec (FOUP set) / Robot access enable
  - Unload: Max. 10sec (Robot access enable) / FOUP eject enable

**Docking Mechanism**

- FOUP clamp: Hold down feature (Air driven)
- FOUP door lock: Vacuum suction

**Water position at docking**
254 mm from BOLTS interface surface

<table>
<thead>
<tr>
<th>Utilities</th>
<th>Clean dry air</th>
<th>Flow: 3DL/min (ANR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum</td>
<td>Pressure: 61 ± 10KPa(G)</td>
<td>6-mm outer-diameter air tube</td>
</tr>
<tr>
<td>Exhaust</td>
<td>6-mm outer-diameter air tube</td>
<td></td>
</tr>
</tbody>
</table>

**Interface**

- Power Source: 24VDC ± 5%, 3A/2 A at full load
- Breaking capacity: 50A
- Communication: RS232C

**Options**

- **Power Cable**
  - Length: 2m, 4m, 6m

- **Carrier ID Reader/ Writer**
  - Omron: V640
  - Brooks: LF 80, LF 60 Solid
  - Asyst: ATF9100

- **E84**
  - Optical I/O only: Hokuyo Automatic DMS-801; DMG-H81
  - Serial comm. control: Details available on request

- **Comm. Protocol**
  - SECS (Details available on request)
  - Lockout Pads 1, 2: Lockout pins

- **Info Pads A, B, C, D, E, F**
  - Electrical detection and lockout pins

- **CE Marking**
  - Yes

---

**Safety and Usage Precautions**

TDK has prepared documentation providing important safety precautions and explaining how to use this equipment correctly and efficiently. Please request this documentation and read through it before using this equipment.