

# SMART

## 300mm Sorter datasheet



The **SMART** is our versatile solution for emerging technologies



SEMI300/S2/S14 compliant  
ISO Class 1 mini-environment  
Load-Ports SEMI compliant E15.1/E57/E62  
Suits all SEMI compliant FOUP/FOSB carriers

### FEATURES & Benefits

- Various substrates & materials
- **Vacuum Free** A.C.T<sup>1</sup> backside or edge contact end-effectors
- **Dual Handling option** (end-effectors & notch alignment station)
- **Accommodating Auto segregation**
- **Connection with OHT available**
- **2nm application compliant**

### MAIN SPECIFICATIONS

Type	SOR300S	SOR300M	SOR300L
<b>Load-port configuration</b>	2 Load-Ports	3 Load-Ports	4 Load-Ports
<b>Substrate type(s)</b> <b>Diameter 300 +/- 0.2mm</b>	<ul style="list-style-type: none"> <li>▪ Siwafer</li> <li>▪ Glass</li> <li>▪ Stacked</li> <li>▪ Mold Compound</li> </ul>		
<b>Throughputs<sup>1</sup></b> <i>Wafer per Hour</i>	<ul style="list-style-type: none"> <li>▪ Without OCR: Up to 540 wph</li> <li>▪ With OCR: Up to 305 wph</li> </ul>		
<b>Cleanliness<sup>2</sup></b>	Down to 0.003 at 26nm particle size		
<b>Power Voltage</b>	Single phase 230 Volts (+/- 10%) 50/60Hz		
<b>Full load current</b>	5A	6A	7A
<b>Mini-environment</b>	<ul style="list-style-type: none"> <li>▪ U16 Ultra Low Penetration Air Filters</li> <li>▪ ISO (14644-1) Class 1 mini-environment</li> </ul>		
<b>Wafer mapping</b>	Double and cross-slotted wafer detection		
<b>Carrier InfoPads</b>	Highly configurable rules and behaviors		
<b>HOST</b>	Communication complies to SECS/GEM & GEM300 Standards		

<sup>1</sup> Measurements done in local mode, after sorter's settings & adjustments properly completed

<sup>2</sup> Particle per Wafer Pass. Measured in an ISO Class 4 cleanroom environment (as per ISO 14644-1), on a sorter properly maintained and with clean substrates and carriers (initial PWP at less than 50 particles)

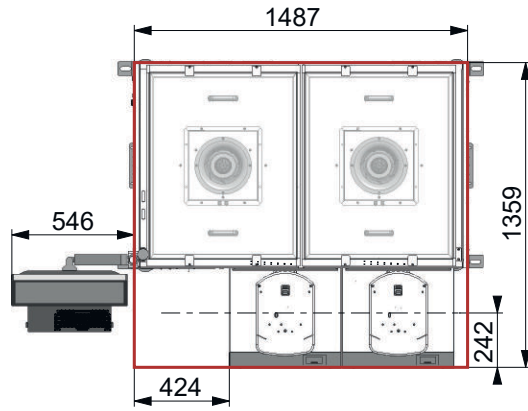
<sup>1</sup> Advanced Contact Technology

### AVAILABLE OPTIONS

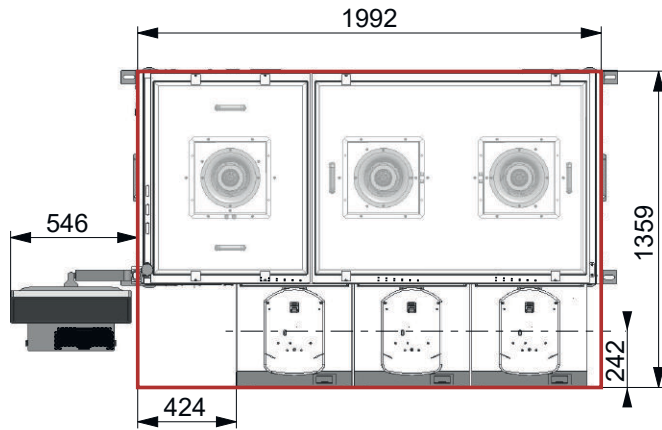
- FOUP Protections
- Ionizer
- Flip
- AMC Filtering
- E84
- Carrier RF-ID and/or Barcode reader
- Rotational Loading stage
- Duplex Wafer ID reading
- N2/XCDA FOUPs' Purge
- & more...

### SORTERS LAYOUT *Width x Depth*

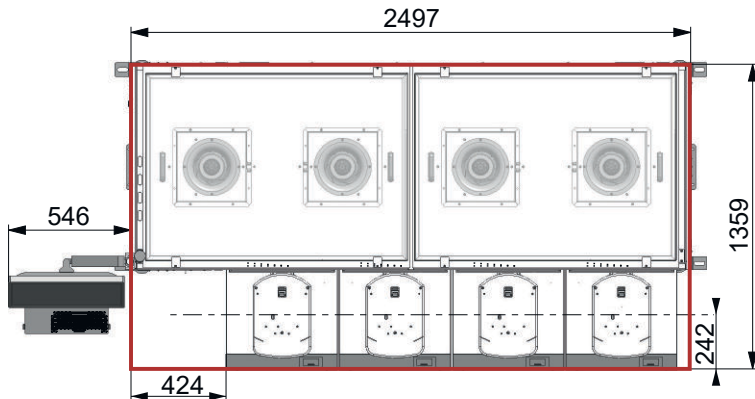
**2 Load Ports**  
 1.49x1.36m  
 2.02m<sup>2</sup> / 21.74ft<sup>2</sup>



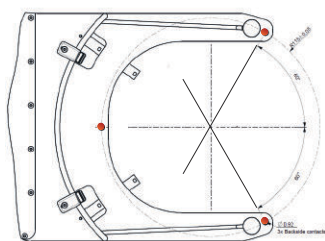
**3 Load Ports**  
 1.99x1.36m  
 2.71m<sup>2</sup> / 29.06ft<sup>2</sup>



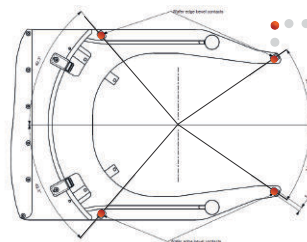
**4 Load Ports**  
 2.50x1.36m  
 3.39m<sup>2</sup> / 36.49ft<sup>2</sup>



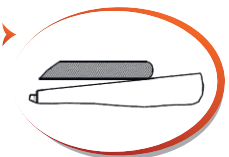
### END-EFFECTORS LAYOUTS



**Backside contact end-effector**  
 Wafer contact area: **0.01%**



**Edge contact end-effector**  
 Wafer contact area: **0.003%**



Slight contact on wafer edge bevel