PR:IME™

Pre-Engineered System Design for Your Semiconductor Inspection & Metrology Technology

Ready to Launch Your Semiconductor Technology

If you've developed a semiconductor inspection or metrology technology and are seeking a fast and low-risk path to market, PR:IME can help transform your innovation into a production-ready system. This pre-engineered platform is built to get your technology into customers' fabs and qualified for their next production orders in record time.

Modular Design for Fast Integration

PR:IME is a pre-engineered system architecture with modular interfaces across Software, Mechanical, and Electrical systems. By adhering to PR:IME interface guidelines, you minimize customization requirements, which significantly reduces Non-Recurring Engineering (NRE) costs and development time. In fact, if your technology aligns with the PR:IME baseline design, the two longest lead-time sub-systems can be ordered on day one, shaving months off your development schedule.

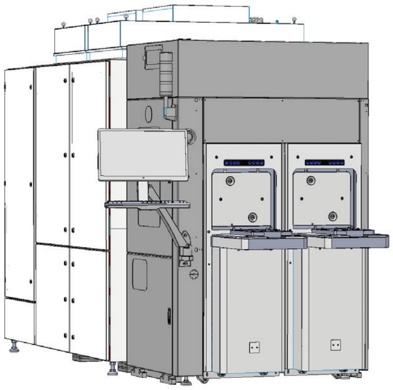
Modular Architecture

Long Lead Items:
EFEM & Stage

Software:
GUI & Controls

Mechanical:
Interfaces / Payload

Electrical:
Power & I/O



Owens Design
Your Design & Build Partner

Key System Components

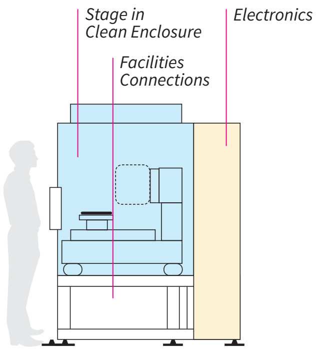
- **EFEM**
- **Stage**
- **Controls Software**
- **Clean Enclosure**
- **Vibration Isolation**

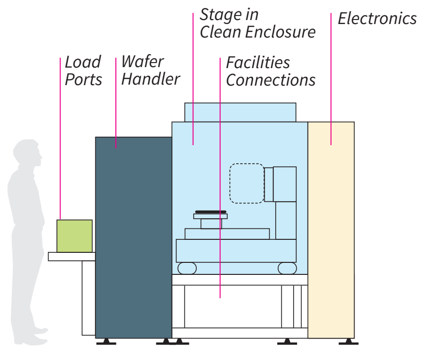
System Functionality

PR:IME™ manages wafer handling and recipe editing with precision. It controls the transfer of wafers from FOUPs or cassettes, aligns and maps them, and positions them accurately on the chuck. While your inspection and metrology (I&M) system captures wafer data, PR:IME's Orchestrator manages the communication flow transmitting data back to the fab using standard SECS/GEM protocols. After processing, the integrated EFEM robot returns each wafer to its designated slot. By handling the factory interface and automation, PR:IME™ frees your team to focus on advancing your core technology.

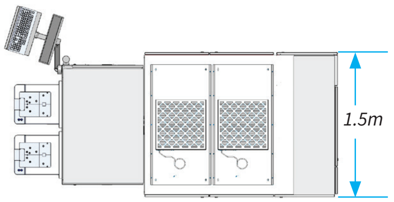
Your Product Journey: Automation Levels

No matter where you are in your product development cycle, PR:IME accelerates your path to market while minimizing risk. For early-stage validation, PR:IME R&D offers a clean, compliant enclosure with manual wafer loading, ideal for customer-site demonstrations and process qualification. As your product evolves, the same system can be upgraded to PR:IME HVM for fully automated wafer handling and factory integration, all without altering your process hardware. This seamless upgrade path ensures process consistency from R&D to high-volume manufacturing.





	PR:IME R&D	PR:IME HVM
ULPA Clean Enclosure	✔	✔
Precision Stage	✔	✔
Motion Controller	✔	✔
Vibration Isolation	✔	✔
Electrical Cabinet & I/O	✔	✔
Facilities Connections	✔	✔
Wafer Loading	Manual: Door	Automated: EFEM
Fab Communication	None	SECS/GEM
3rd Party Eval: SEMI/CE Mark	Optional	Included



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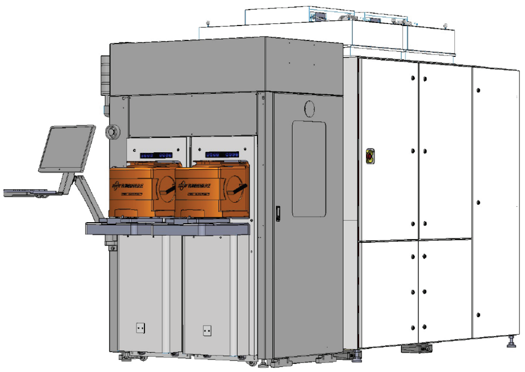

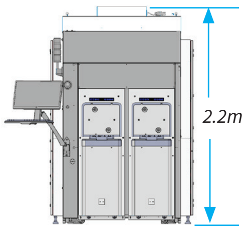

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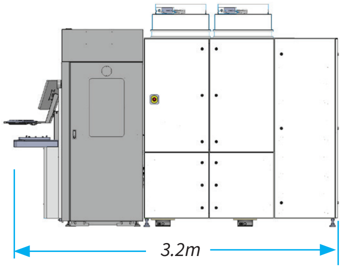

SIDE

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