

Equipment Front End Module **EFEM**



HIWIN Support

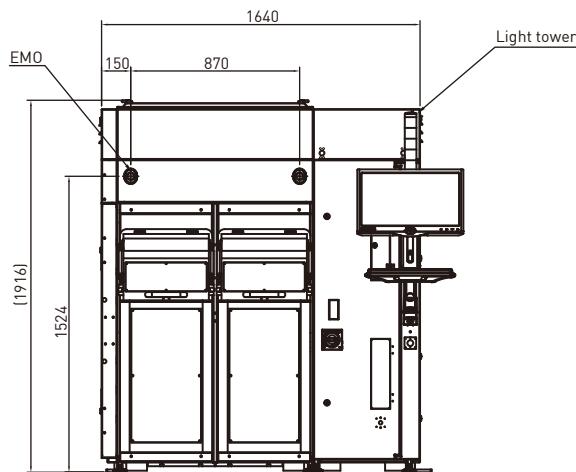
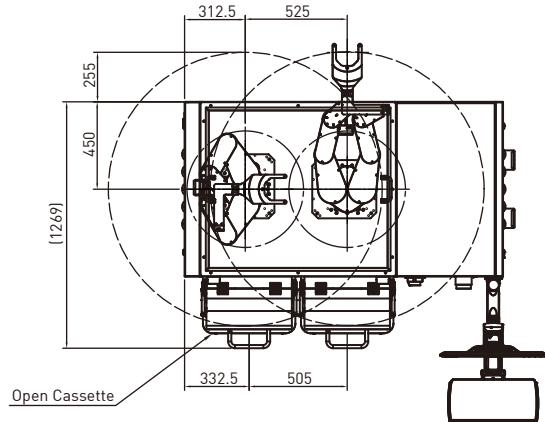


About HIWIN

EFEM220-D13



Dimensions / Working Range

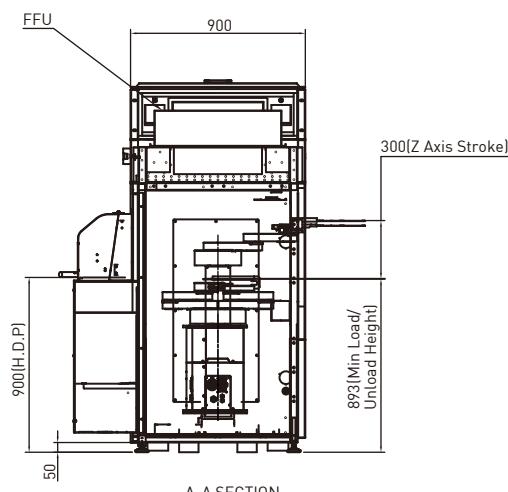


Features

- 6-inch and 8-inch Open Cassette standard models offer customizable configurations to meet specific requirements.
- Adhering to international semiconductor equipment safety standards defined by SEMI S2.
- All components are compliant with RoHS regulations, achieving the highest level of cleanliness, up to Class 1 (ISO 3) standards.
- Multiple sensors detect various components, allowing real-time monitoring of equipment status.
- Remote operation commands integrate various devices, accessible through a user-friendly single-command window.

Item	Specifications
Number of Ports	2 Ports
Robot Model	RWSE/RWDE/RWSA/RWDA* ^{Note 1}
Reach	255mm
Wafer	150mm, 200mm
Repeatability	±0.1mm
Dimensions	1640mm[W] x 1269mm[D] x 1916mm[H]
Cleanliness	Class 1 (ISO 3)
Power Supply	Single Phase, AC200~220V, 50/60Hz, 20A
Flow	Positive Pressure: 300L/min, Negative Pressure: 50L/min
Optional Accessories	<ul style="list-style-type: none"> • Wafer ID Reader • 1D/2D Code Reader • Wireless RFID Reader • Wafer Edge Detection Module • Frame/Carrier Calibration Module • Wafer Flip Module • API Command/UI Interface • ESD Resistance Requirements • Fork Material Selection

* Note 1: Various robot models available according to customer's requirements.



EFEM320-D02



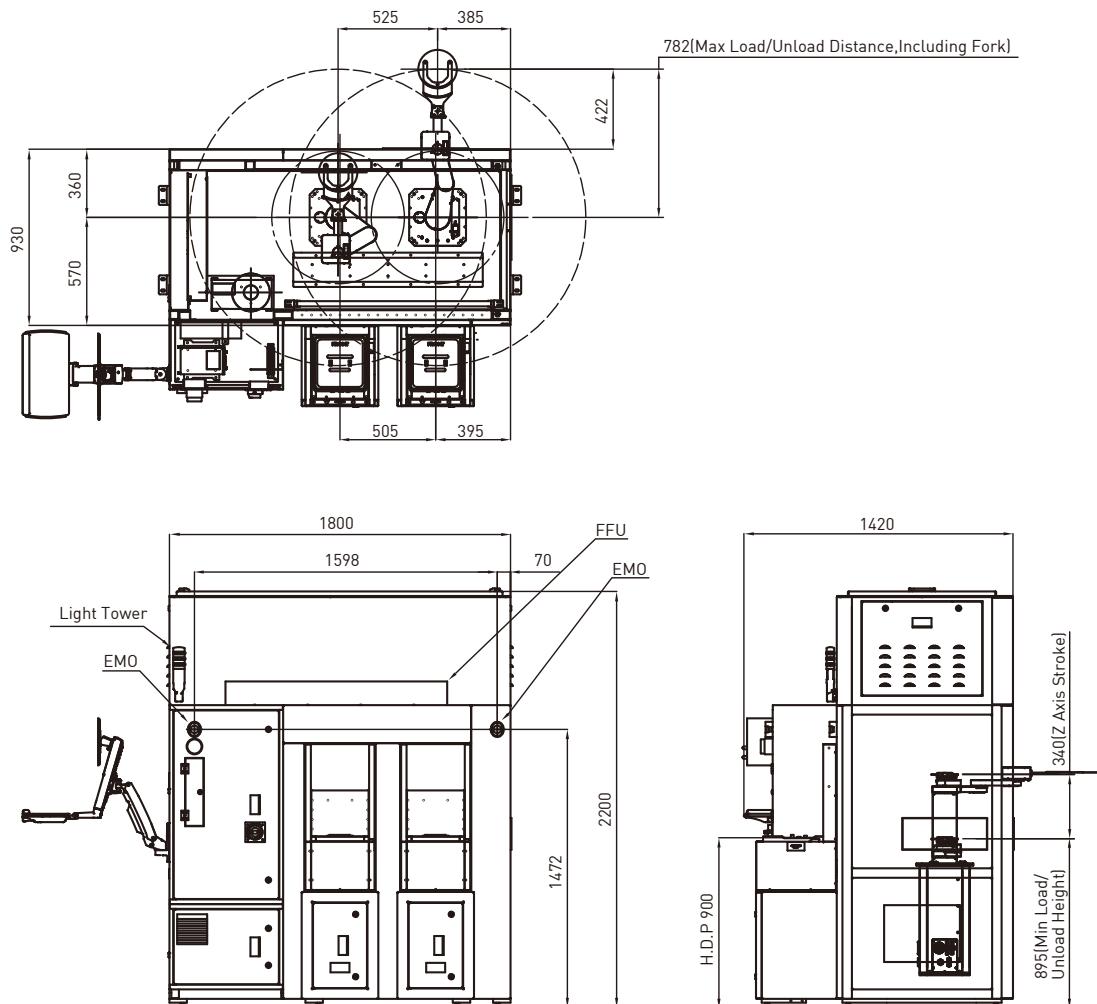
Dimensions / Working Range

Features

- 8-inch SMIF standard model.
- Designed with an external control box, maximizing interior rack space while meeting international semiconductor equipment safety certification SEMI S2.
- All components are compliant to RoHS regulations, achieving the highest level of cleanliness, up to Class 1 (ISO 3) standards.
- Multiple sensors detect various components, enabling real-time monitoring of equipment status, barcode, label, and character recognition, ensuring complete production process tracking.

Item	Specifications
Number of Ports	2 Ports
Robot Model	RWSE/RWDE/RWSA/RWDA*Note 1
Reach	422mm
Wafer	200mm, warpage $\pm 0.5\text{mm}$, thickness 500~1000 μm
Repeatability	$\pm 0.1\text{mm}$
Dimensions	1800mm(W) X 1420mm(D) X 2200mm(H)
Cleanliness	Class 1 (ISO 3)
Power Supply	Single Phase, AC200~220V, 50/60Hz, 20A
Flow	Positive Pressure 300L/min, Negative Pressure 50L/min
Optional Accessories	<ul style="list-style-type: none"> • Wafer ID Reader • 1D/2D Code Reader • Wireless RFID Reader • Wafer Edge Detection Module • Frame/Carrier Calibration Module • Wafer Flip Module • E84 Module • API Command/UI Interface • ESD Resistance Requirements • Fork Material Selection

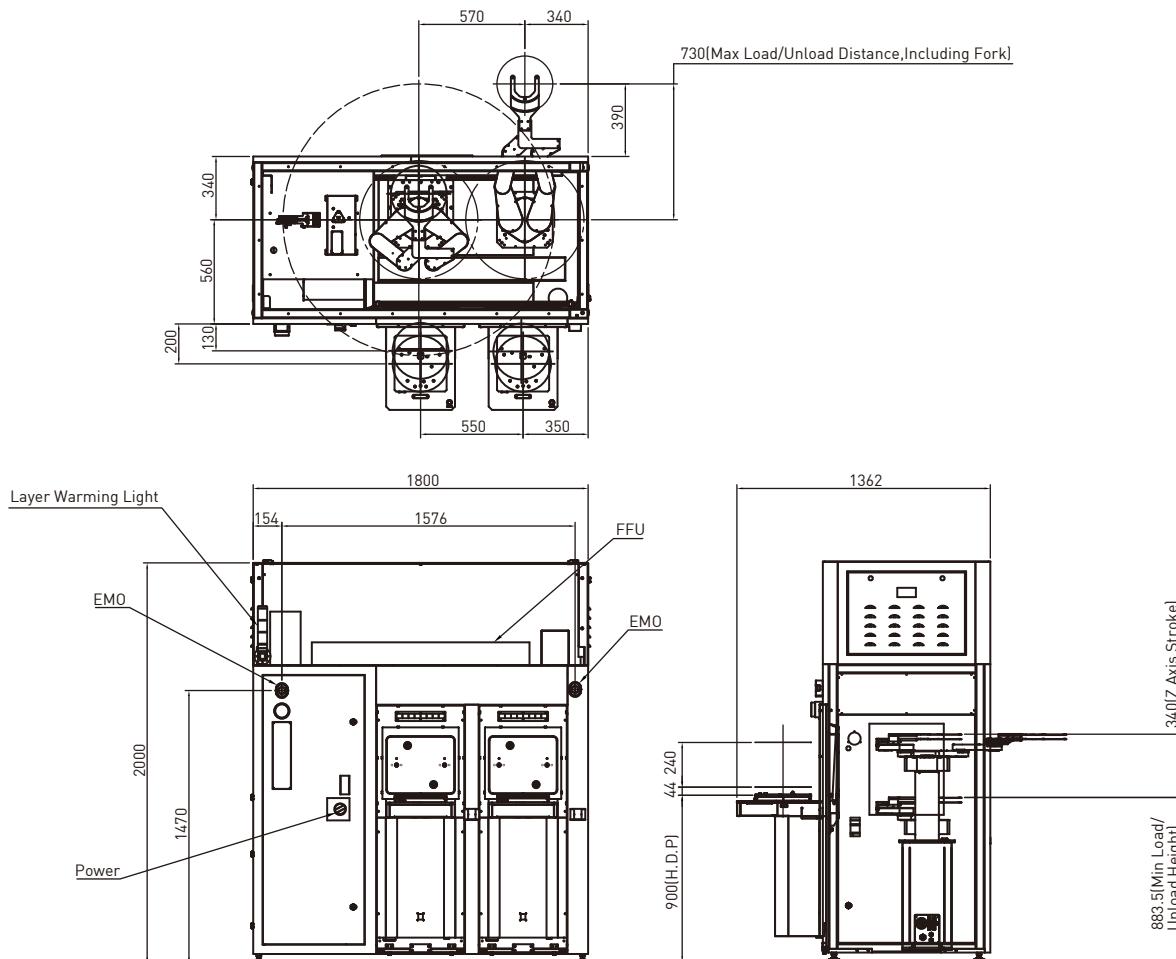
* Note 1: Various robot models available according to customer's requirements.



EFEM320-D13



Dimensions / Working Range



Features

- 8-inch and 12-inch standard models.
- Electric control cabinet can be adjusted according to customer's requirement.
- Compliant with international semiconductor equipment safety certification SEMI S2.
- All components adhere to RoHS regulations, achieving the highest level of cleanliness, up to Class 1 (ISO 3) standards.
- Multiple sensors detect various components, enabling real-time monitoring of equipment status.
- Real-time video monitoring, barcode and label character recognition complete production process tracking.
- Offering customized solutions for wafer and other substrate handling.

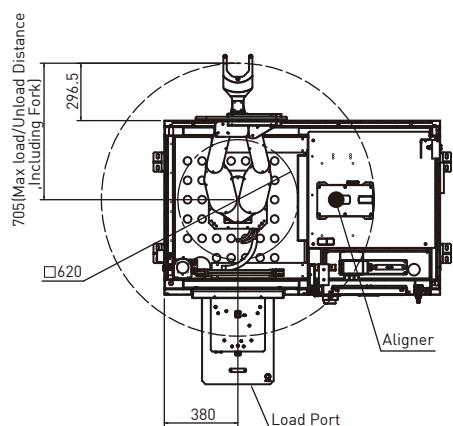
Item	Specifications
Number of Ports	2 Ports
Robot Model	RWSE/RWDE/RWSA/RWDA* ^{Note 1}
Reach	390mm
Wafer	200mm, warpage ± 0.5 mm, thickness 500~700 μ m; 300mm, warpage ± 1 mm, thickness 650~750 μ m
Repeatability	± 0.1 mm
Dimensions	1800mm(W) X 1362mm(D) X 2000mm(H)
Cleanliness	Class 1 (ISO 3)
Power Supply	Single Phase, AC200~220V, 50/60Hz, 20A
Flow	Positive Pressure 300L/min, Negative Pressure 120L/min
Optional Accessories	<ul style="list-style-type: none"> • Wafer ID Reader • 1D/2D Code Reader • Wireless RFID Reader • Wafer Edge Detection Module • Frame/Carrier Calibration Module • Wafer Flip Module • API Command/UI Interface • ESD Resistance Requirements • Fork Material Selection

* Note 1: Various robot models available according to customer's requirements.

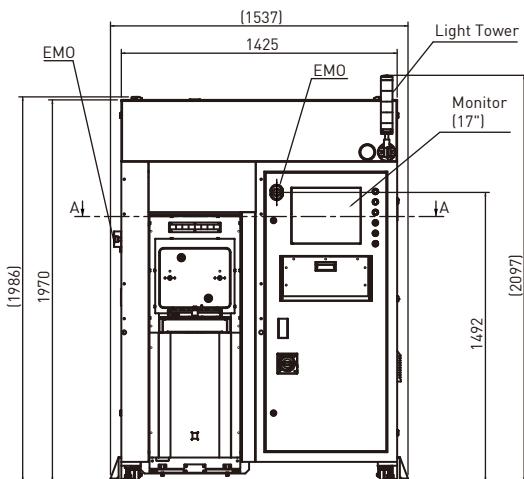
EFEM310-D13



Dimensions / Working Range



SECTION A-A

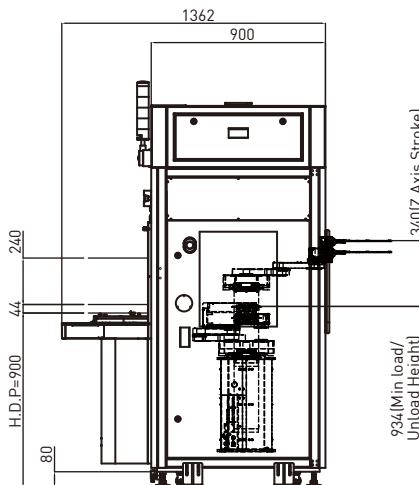


Features

- 8-inch and 12-inch Standard Models.
- The type of electric control cabinet can be adjusted according to customer's requirement.
- Certified to meet international semiconductor equipment safety standards, SEMI S2.
- All components comply with RoHS regulations, achieving the highest level of cleanliness, up to Class 1 (ISO 3) standards.
- Multiple sensors detect various components, providing real-time equipment status monitoring and offering customized solutions for wafer or other substrate handling needs.
- An automatic pressure control system adjusts fan speeds to maintain set values in response to environmental pressure fluctuations.

Item	Specifications
Number of Ports	1 Ports
Robot Model	RWSE/RWDE/RWSA/RWDA* ^{Note 1}
Reach	296.5mm
Wafer	200mm, warpage ± 0.5 mm, thickness500~700 μ m; 300mm, warpage ± 1 mm, thickness650~750 μ m
Repeatability	± 0.1 mm
Dimensions	1537mm(W) x 1362mm(D) x 2097mm(H)
Cleanliness	Class 1 (ISO 3)
Power Supply	Single Phase, AC200~220V, 50/60Hz, 20A
Flow	Positive Pressure 300L/min, Negative Pressure 100L/min
Optional Accessories	<ul style="list-style-type: none"> • Wafer ID Reader • 1D/2D Code Reader • Wireless RFID Reader • Wafer Edge Detection Module • Frame/Carrier Calibration Module • Wafer Flip Module • E84 Module • API Command/UI Interface • ESD Resistance Requirements • Fork Material Selection • 8-inch Adapter Selection

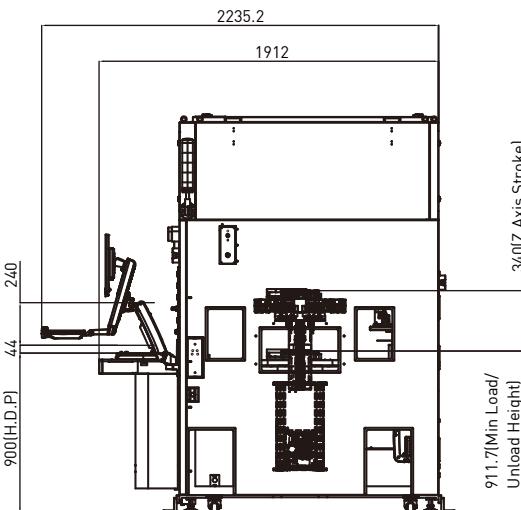
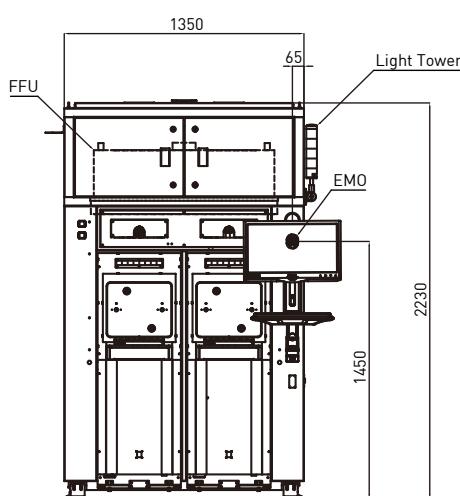
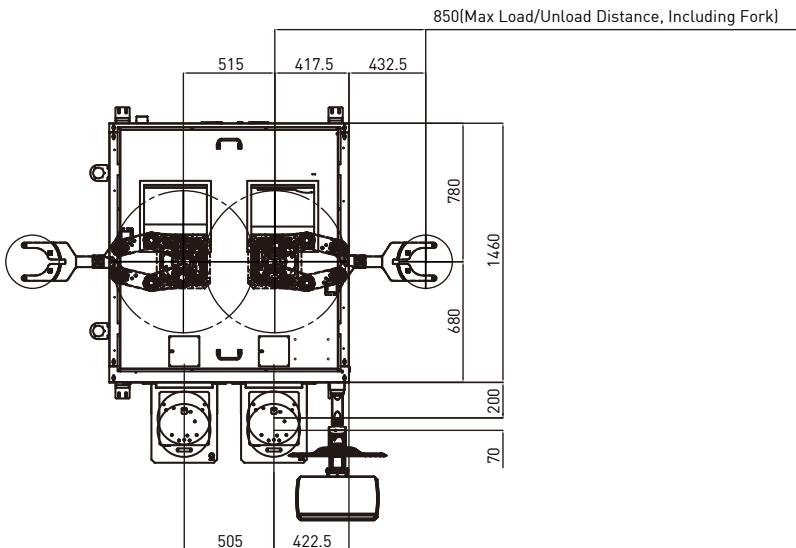
* Note 1: Various robot models available according to customer's requirements.



EFEM320-D06



Dimensions / Working Range



Features

- On the 12-inch Wafer and 12-inch Metal Carrier standard models.
- Featuring a flat-panel-style electrical control cabinet design, the one-to-two configuration is the optimal choice, meeting international semiconductor equipment safety standards, SEMI S2.
- All components are RoHS compliant, achieving the highest level of cleanliness, up to Class 1 (ISO 3) standards.
- Multiple sensors detect various components, providing real-time equipment status monitoring.
- Real-time video monitoring, barcode and label character recognition complete production process tracking.
- Offering customized solutions for wafer and other substrate handling.

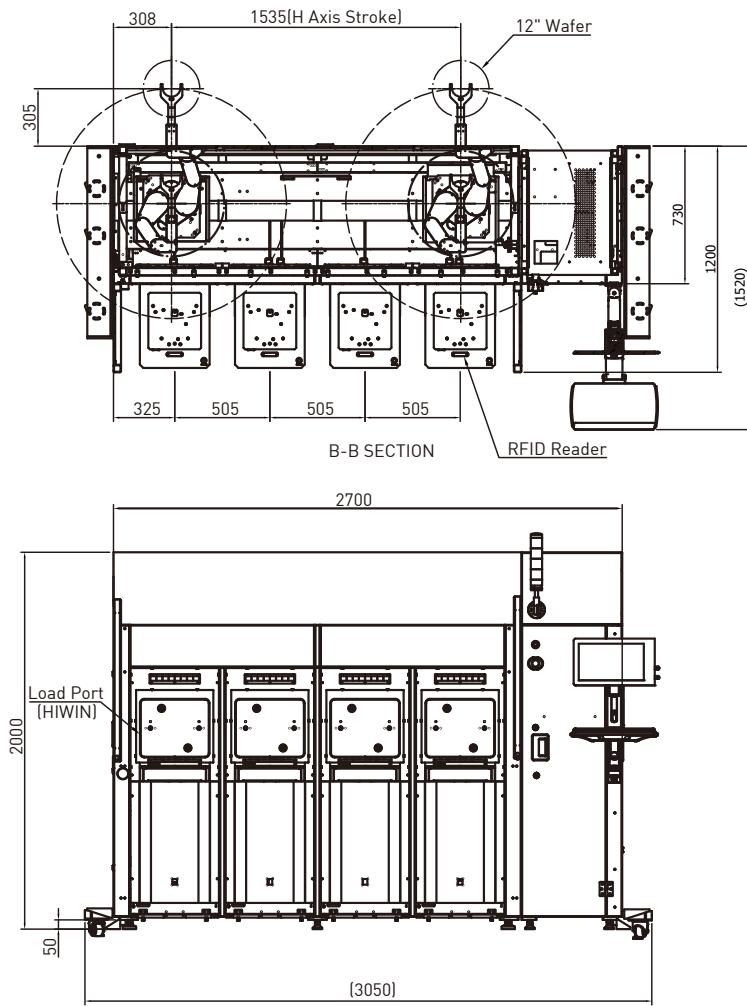
Item	Specifications
Number of Ports	2 Ports
Robot Model	RWSE/RWDE/RWSA/RWDA* <small>Note 1</small>
Reach	432.5mm
Wafer	300mm, warpage $\pm 1\text{mm}$, thickness 650~1200 μm
Iron Frame	300mm, warpage $\pm 1\text{mm}$, thickness 1600 μm
Repeatability	$\pm 0.1\text{mm}$
Dimensions	1350mm(W) x 1912mm(D) x 2230mm(H)
Cleanliness	Class 1 (ISO 3)
Power Supply	Single Phase, AC200~220V, 50/60Hz, 20A
Flow	Positive Pressure 300L/min, Negative Pressure 120L/min
Optional Accessories	<ul style="list-style-type: none"> Wafer ID Reader Optional 1D/2D Code Reader Wireless RFID Reader Wafer Edge Detection Module Frame/Carrier Calibration Module Wafer Flip Module E84 Module API Command/UI Interface ESD Resistance Requirements Fork Material Selection 8-inch Adapter Selection

* Note 1: Various robot models available according to customer's requirements.

EFEM340-D13



Dimensions / Working Range



Features

- High-Speed long-travel distance 12-inch standard model.
- Equipped with a safety light curtain design to enhance safety, it's the best choice for intelligent factories, meeting international semiconductor equipment safety standards, SEMI S2.
- All components are RoHS compliant, achieving the highest level of cleanliness, up to Class 1 (ISO 3) standards.
- Multiple sensors detect various components, enabling real-time equipment status monitoring.
- Remote operation commands integrate various devices, accessible through a user-friendly single-command window.

Item	Specifications
Number of Ports	4 Ports
Robot Model	RWSE/RWDE/RWSA/RWDA* ^{Note 1}
Reach	305mm
Wafer	300mm, warpage $\pm 1\text{mm}$, thickness 650~750 μm
Repeatability	$\pm 0.1\text{mm}$
Dimensions	2700mm[W] x 1200mm[D] x 2000mm[H]
Cleanliness	Class 1 (ISO 3)
Power Supply	Single Phase, AC200~220V, 50/60Hz, 20A
Flow	Positive Pressure 600L/min, Negative Pressure 120L/min
Optional Accessories	<ul style="list-style-type: none"> • Wafer ID Reader • 1D/2D Code Reader • Wireless RFID Reader • Wafer Edge Detection Module • Frame/Carrier Calibration Module • Wafer Flip Module • E84 Module • API Command/UI Interface • ESD Resistance Requirements • Fork Material Selection • 8-inch Adapter Selection

* Note 1: Various robot models available according to customer's requirements.

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