

Load Port



SEMI S2 CE  RoHS



HIWIN Support



About HIWIN

Feature /

- HIWIN Load Port HLP series can be used for loading and unloading 8-inch and 12-inch products. It can directly dock with 8-inch and 12-inch FOUP/FOSB, and can also be equipped with an 8-inch open cassette adapter.
- The cleanliness level of the product is Class 1. It can be applied to various semiconductor process equipment, such as photolithography, etching, CVD, PVD, cleaning, testing, encapsulation etc.
- In compliance with relevant safety regulations, the system not only provides an emergency stop function but also monitors each functional module in real-time. Such as motor control systems, sensing systems, vacuum systems, etc., provide users with the most comprehensive and safe protection.

Self-made Key Component /

All key components in the Load Port, such as linear guideways, single-axis robot etc., are all developed and manufactured by HIWIN. Software and hardware are vertically integrated, and also provide customized services according to customer production needs.



Linear Guideway



Single-Axis Robot

System Structure /



Model Table /

HLP 812 - G M 80CA - R1 E84 - N - □

Load Port	□	Customization Serial number: Customized (Options)
Model	812: 8 inch, 12 inch shared type	Null: Null
Protrusion Function	G: Glass wafer Protrusion function (Options) Null: Detection of wafer protrusion (Standard)	Ethernet unit N : Ethernet interface (Options) Null: Null
Mapping	M: Mapping (Options) Null: Null	E84 unit E84: 1 set of E84 (Options) Null: Null
Adapter (Multiple choice)	80CA: 8 inch open cassette adapter (Options) Null: Null (work on FOUP \ FOSB)	ID reader (Multiple choice) R1: RFID (Including 1 set of antennas) (Options) R2: RFID (Including 2 set of antennas) (Options) Null: Null

Specifications and Dimensions /

HLP812

8, 12 Inch

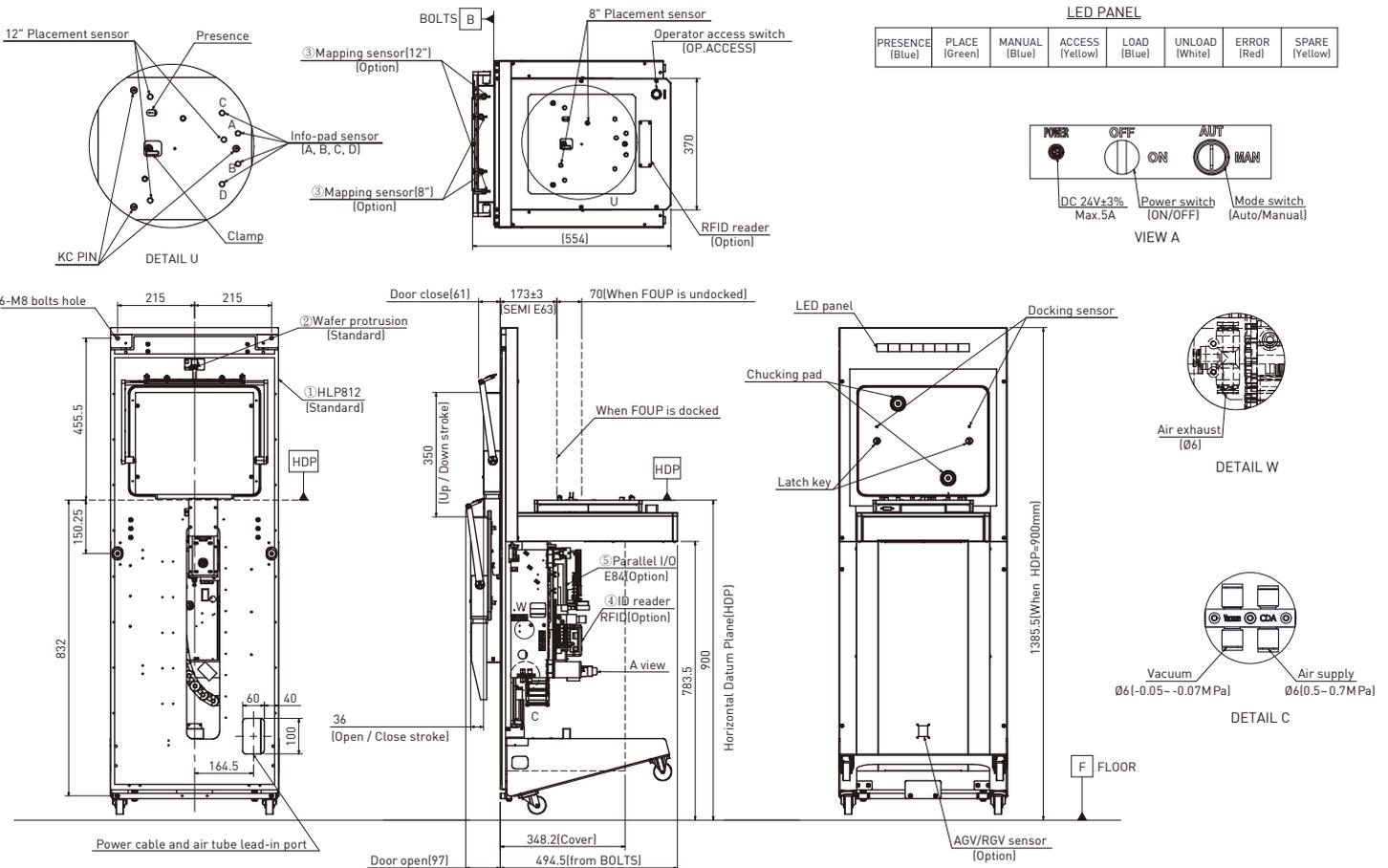
● Standard Function

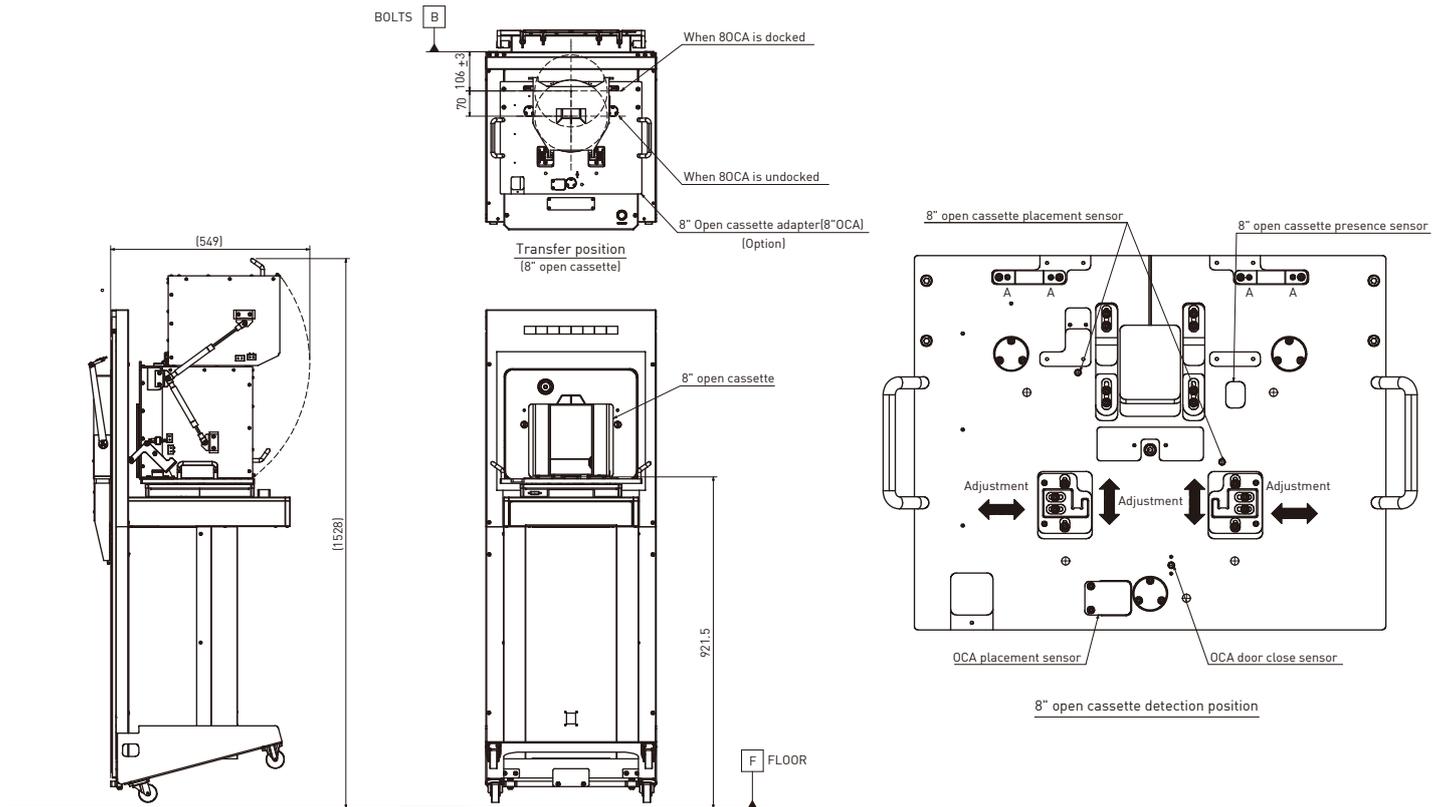
- Carrier identification info pad A/B/C/D sensor
- Detection of presence, supporting transparent carrier
- Detection of carrier placement
- Clamping for carrier or adapter
- FOUF/FOSB door dock detection function. Detecting the presence or detachment of the door frame.
- Detection of wafer protrusion
- Detection of pinch prevention
- LED status indicator

● Options

- Wafer mapping function
- Glass wafer protrusion detection function
- 8" open cassette adapter, 80CA
- RFID unit
- E84 unit (Parallel I/O)
- Ethernet communication interface
- Customization function

Item	Specifications	
Type	8, 12 Inch	
Model	HLP812	
Product	8 inch and 12 inch FOUF/FOSB 8 inch Open Cassette(H bar)	
Dimensions	Height	1385.5 mm
	Width	469 mm
	Depth	494.5 mm
	HDP	Horizontal Reference Height 900
Weight	65 kg	
Communication	RS232	
FOUF Docking	Dock Stroke	70 mm
	Dock Position	173 ± 3 mm (FDP to BOLTS Surface)
	Undock Position	243 ± 3 mm (FDP to BOLTS Surface)
Power Supply	Voltage	DC 24 V ± 3%
	Current	Max. 5A
Vacuum	Pressure	0.5~0.7 MPa
	Vacuum	-0.05 ~ -0.07 MPa
Cleanliness Level	Class 1	





Standard Items /

- Load Port: 1 unit
- Power supply cable: 1 cable
- RS232 cable: 1 cable
- Emergency stop connector: 1 (DB9-F connector)
- Foam set: 1 bag
- Cover group: 1 set
- Upper horizontal bar group: 1 set
- Lower horizontal bar group: 1 set
- Fuses: 8 pieces
- Hex socket screw set and washer set: 1 set each



Model Selection Requirement Table

Company Name:		Application:	Date:
Contact Person:		<input type="checkbox"/> SEMI	HIWIN Visitor :
Tel:		<input type="checkbox"/> LED	
Address:		<input type="checkbox"/> Others	
Condition	Product Size	Circle <input type="checkbox"/> 6"(150mm) <input type="checkbox"/> 8"(200mm) <input type="checkbox"/> 12"(300mm)	Thickness: _____ ~ _____(μm)
		Frame <input type="checkbox"/> 8" <input type="checkbox"/> 12"	Warpage: _____(mm)
		Square <input type="checkbox"/> 300x300 (mm) <input type="checkbox"/> 310x310 (mm) <input type="checkbox"/> 380x380 (mm)	Material: _____
		<input type="checkbox"/> Others: _____	Weight: _____(g)
		Process Used: _____	
Cassette	Circle	<input type="checkbox"/> 12" FOUP/FOSB <input type="checkbox"/> 8" Open Cassette <input type="checkbox"/> Others: _____ Brand: _____; Model: _____; Slot: _____	
	Frame	<input type="checkbox"/> 12" Frame Cassette <input type="checkbox"/> Others: _____ Brand: _____; Model: _____; Slot: _____	
	Square	<input type="checkbox"/> Foup <input type="checkbox"/> Cassette <input type="checkbox"/> Others: _____ Brand: _____; Model: _____; Slot: _____	
Comm.	RS232	<input type="checkbox"/> D-SUB Connector (Standard) <input type="checkbox"/> RJ-45 Connector (Optional)	
Others	Mapping	<input type="checkbox"/> None	<input type="checkbox"/> Required
	RFID	<input type="checkbox"/> None	<input type="checkbox"/> Heart <input type="checkbox"/> Others: _____ Specifications: _____
	E84	<input type="checkbox"/> None	<input type="checkbox"/> ANDREWS (HOKUYO sensor) <input type="checkbox"/> FAIR-DRAGON <input type="checkbox"/> Others: _____

Other Function / Requirement Description:

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