



## FOUP Load Port

# TAS300

TYPE: J1

The TAS300 is a latest 300mm load port from TDK, for automatic Door open/close for front-opening unified pods (FOUPs). The TAS300 Type J1 is a high-performance module that meet your needs for particle-free operation, fast throughput.

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## Features

### 1 SEMI Standard

E15.1-0305

E57-0600

E62-0306

E63-1104

E64-1105

E110-1102

S2-0706

S8-0308

S14-0704

**2** With all moving parts, including mapping unit, are installed below the wafer surface, which provides high-level particle-free design. The highest level of airflow analysis delivers particle-free design.

**3** The air-cushioned pneumatic drive on docking plate and FIMS door opening provide calibration-free operation, with a wide variety of FOUPs (Supports 300 mm FOUPs compliant with SEMI E47.1 and E62.)

**4** Transmission-type mapping unit optionally available.

**5** High-reliability design delivers trouble-free operation over a long period of time.

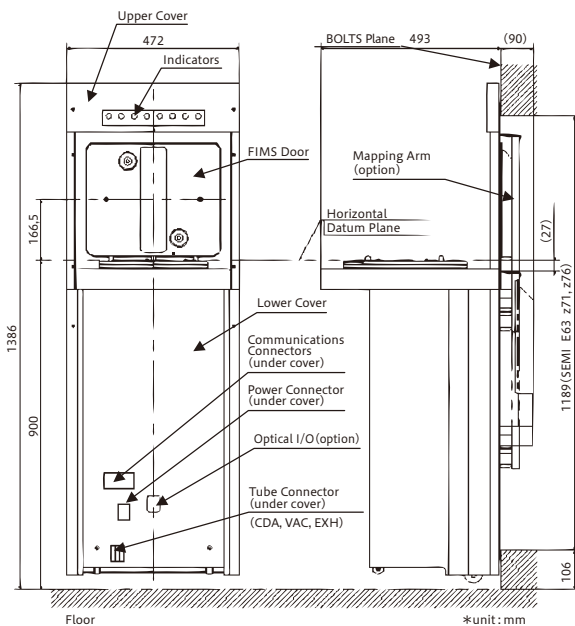
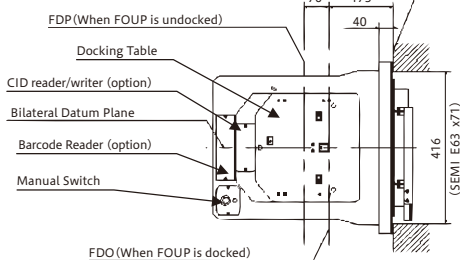
**6** Obstacle detection sensors on Dock position.

**7** FOUP/Placement detection.

**8** Easy positioning mechanism to reduce installation time for mounting and dismounting.

### External View

\*FDP:Facial Datum Plane



Supported FOUPs		
Manufacturer	Type	
Entegris	F300 Auto Pod ; A300-G3 ; SPECTRA	
Shin-Etsu Polymer	FOUP 300E ; FOUP 300EX	
Miraial	KT-3003	
Dainichi Shoji	SF300-02	
Others	300-mm FOUPs compliant with SEMI E47.1 and E62	

Standard Specifications			
External Dimensions and Weight	Full Height	1,386mm	
	Full Width	472mm	
	Depth	493mm (from BOLTS plane)	
Operation Times	Without mapping	Load	Max. 8sec (FOUP set → Robot access enable)
		Unload	Max. 8sec (Robot access enable → FOUP eject enable)
	With mapping	Load	Max. 1.1sec (FOUP set → Robot access enable)
		Unload	Max. 8sec (Robot access enable → FOUP eject enable)
Docking Mechanism	FOUP clamp	Front retaining feature (Air driven)	
	FOUP door lock	Vacuum suction	
	Docking stroke	70mm	
	Repetition accuracy	± 0.1mm	
	Distance from FDP to FIMS door	165.0mm	
	Distance from FDP to frame	167.0mm	
Utilities	Clean dry air	Pressure	0.52-0.60MPa (G)
		Flow	30L/min (ANR)
	Vacuum	Pressure	-61 ± 10kPa (G)
		Flow	10L/min (ANR)
	Exhaust	Noise	MAX 60dB (Aeq)
Interface	Power Source	24 VDC ± 5%, 3A (2-A at full load) Breaking capacity:50A	
	Communication	RS232C	

Options		
Power Cable	Length	2m ; 4 m ; 6 m
	Keyence	BL-601 ; SR-610
Carrier ID Reader/Writer	Omron	V640
	Brooks	LF80 ; LF60 Eco ; LF60 Solid
	Crossing Automation	ATR9100 ; PB-90
	Details about other CIDs available on request.	
E84	Optical I/O only	Hokuyo Automatic DMS-HB1 ; DMG-HB1
	Serial comm. control	Details available on request.
Interface	Ethernet (Details available on request.)	
	Comm. Protocol	
Info Pad Pin	Info pads A, B	Electrical detection and lockout pins
	Info pads C, D	Lockout pins
Doubled-wafer detection sensor	Detects presence of two wafers in single slot. Details available on request.	
Protrusion detection sensor for quart-glass wafers	Detection characteristics vary for each FOUP. Details available on request.	

### 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.



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<https://product.tdk.com/info/en/products/fa/index.html>