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Standard Specifications For CANON PLA-501

(Common to PLA-501 FA and 501 F (S)

Photo mask size	3"; 4"; 5", 6" Mask
Wafer size	2", 3", 4" 5" [SEMi used as standard]
Illuminator	
Uniformity	--+3%
Exposure time setting	Timer
Printing time	2 seconds for nega-resist (OMR-83) 5 seconds for posi-resist (AZ-1350)
Alignment scope	
Objective lens	× 10
Eyepiece	x 1 O, x 15
Field of observation	Split image
Scanning range	XY scanning by left hand X and Y directions: +/- 8mm each
Alignment method	
[In case of PLA-501 FA]	Auto alignment
Tolerance setting	-+0.5, -+1.0, -+2.0/~m
Alignment time	Approx. 10 sec.
Alignment pattern	Key patterns for auto alignment
Offset control	READ and WRITE possible (0--7.9/~m, in 0.1/~m units, 0--79/~m, in 1/~m units)
Observation dur-lng auto alignment	Possible
Alignment mode	Three modes of auto, semi-auto and manual possible
[In case of PLA-501 FA and 501 F]	Manual alignment
XY adjustment	By means of the wafer XY alignment grip Coarse: 4:1, Fine: 100:1, Maximum travel of (;b 10 (501F), (~7 (501 FA)
e adjustment	By means of the wafer e control switches Changeable between coarse and fine Travel of -+5° with self-centering mecha-nism
Photo mask e adjustment	The photo mask is also relatable -+5° by knob operation .....
Printing method	Proximity and contact modes selectable
Alignment gap	0/~m to 98/~m
Proximity gap	0p, m to 48/~m
Contact printing	Vacuum contact method Contact pressure changeable from 10cmHg to user-supplied vacuum pressure.
Auto feeder	Possible to change between auto and manual feed
Carrier	GCA or Teflon carrier with pitch of 3/16", 25 wafer capacity
Drive method	Belt and air bearing drive
Realignment accuracy	(bO.1 mm
Cycling time (index)	Approx. 30 sec. (with alignment time 10 sec. and exposure time 1 sec.)

Dimensions	
Body	940mm (W) × 800mm (D) × 724mm (H) (37.0" x 31.5" x 28.5")
Body on special table	1100mm (W) × 820mm (D) × 1344mm (H) (43.3" × 32.3" x 52.9")
Control box	300mm (W) × 710mm (D) x 487mm (H) (11.8"x 28.0" x 19.2 *")*
Weight	
PLA-501 FA on special table	225 kg (496 lbs.)
PLA-501 F on special table	210 kg (462 lbs.)
Control box	30 kg (66 lbs.)
Utility	
Power	Main body: AC 110v, 240v Power supply box: 800VA or more
High pressure air	3.5 kg/cm^S (49.8 p.s.i.) or more
Low pressure air (clean air)	2.5 kg/cm^S (35.6 p.s.i.) or more
N2gas	1 kg/cm^S (1 4.2 p.s.i.) or more
Vacuum	45 cm--76 cm Hg (17.7"--29.9" Hg)

STANDARD COMPOSITION

1. Main body (PLA-501 FA or 501 F) 1
2. Illuminator 1
3. Alignment scope 1
4. Objective lens x 10 .....1 pair
5. Eyepiece × 10, × 15 .....1 pair each
6. Photo mask holder 7") *1*
7. Wafer chuck 1
8. Calibrator *1*
9. Auto feeder .....1 set
10. Control box 1
11. Mercury lamp power supply box 1
12. Special table 1
13. Tools.....1 set
14. Filter ND-50, ND-25, L-39 (not included) .....1 each
15. Level 1

(In case of PLA-501 FA, FA unit is attached separately.)

OPTIONAL EQUIPMENT

1. Objective lens x5, ×20
2. Wafer chuck
3. Calibrator Various sizes (SEMI used as standard)
4. Auto feeder
5. Gap measuring equipment
6. Extension board
7. UC filter
8. Illuminatorfor UV, DPUV or Near UV,

Power: 250w, 500w, 1000w or 1500w