



**EA UP1200**



**UP1200**



**5C**



**F1200**



**F8500**



<b>OVERVIEW</b>	Residue-free fluxless oven for the most demanding applications	High throughput oven providing industry leading performance for wafer bumping	Tabletop oven offering the highest performance to size ratio in the industry	Offering the best value for large substrates, the F1200 can fit any budget	Affordable versatility across a broad range of substrates
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**FEATURES**

HEATING ZONES	5	6	4	7	5
COOLING ZONES	3	2	2	2 w/ SB   1 w/ WB	2 w/ SB   1 w/ WB
LOAD/UNLOAD BUFFERS	Standard	Standard		Standard	Standard
ZONE TEMPERATURES	752°F   400°C ±2°C	752°F   400°C ±2°C	752°F   400°C ±2°C	752°F   400°C ±2°C	752°F   400°C ±2°C
DIRECTION OF FLOW	Left to Right	Bi-directional	Bi-directional	Bi-directional	Bi-directional
TRANSPORT SYSTEM	Ceramic Rollers	Walking Beam   LIFT	Sweeper Bar	Sweeper Bar   Walking Beam (WB)	Sweeper Bar   Walking Beam (WB)
AUTOMATION	SMEMA   SECS/GEM	SMEMA   SECS/GEM		SMEMA   SECS/GEM	SMEMA   SECS/GEM
MINIMUM O <sub>2</sub> LEVEL (PPM)	15	15	15	20	20

**SUBSTRATE CAPACITY**

MIN/MAX DIMENSIONS – INCH (MM)	4.9 (125) L x W min 11.8 (300) L x W max	3 (7.6) W min 11.8 (300) L x W max	No min 5 x 5.75 (125 x 144) L x W max	3 (7.6) W min 11.8 (300) L x W max	3 (7.6) W min 8 x 11 (20 x 28) L x W max
MAXIMUM HEIGHT – INCH (MM)	3.5 (89)	3.5 (89)	4 (101)	3.5 (89)	3.5 (89)
MAXIMUM WEIGHT – LBS (KG)	1 (0.45) if all zones used	WB 1 (0.45), LIFT 5 (2.3) if all zones used	1 (0.45) if all zones used	2.5 (1.1) if all zones used	2.5 (1.1) if all zones used

**FACILITY REQUIREMENTS**

INPUT VOLTAGE (VAC)	220   380	220   380	110   220   380	220   380	220   380
INPUT AMPS RMS (A)	55 @ start-up ≤30 @ steady state	55 @ start-up ≤30 @ steady state	24 @ start-up ≤12 @ steady state	37 @ start-up ≤19 @ steady state	22 @ start-up ≤11 @ steady state
SYSTEM POWER (KW)	28 @ start-up ≤14 @ steady state	27 @ start-up ≤13.5 @ steady state	11 @ start-up ≤5.5 @ steady state	33 @ start-up 17 @ steady state	10 @ start-up 5 @ steady state
TOTAL COVER GAS RATE (CFM)	≤18.3	≤18.3	≤5	≤20	≤17
COOLING WATER FLOW (GPM)	≤10	≤10	≤2	≤2	≤2
DIMENSIONS (W x D x H)	185 x 46 x 79 inches 470 x 117 x 201 cm	185 x 46 x 79 inches 470 x 117 x 201 cm	53 x 25 x 26 inches 135 x 64 x 66 cm	164 x 24 x 45 inches 417 x 61 x 114 cm	126 x 28 x 45 inches 320 x 71 x 114 cm



**UP2000**



**UP4000**



**ICS412  
WASHER/COATER**



**Hotplate**



**Shuttle**



<b>OVERVIEW</b>	Maximizing floorspace for Auer boat, BGA, and lead frame applications	Increasing the throughput of the UP2000, the UP4000 can meet high throughput needs	Versatile multi-dispense flux coaters and washers offering maximum versatility	Cost and space sensitive hotplate is the optimal choice for SMT repair and R&D needs	Enabling automated process flow for any manufacturing space
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<b>FEATURES</b>				
HEATING ZONES	4	7		1
COOLING ZONES	2	4		0
LOAD/UNLOAD BUFFERS	Standard	Standard	Belt or Robot transfer	
ZONE TEMPERATURES	752°F   400°C ±2°C	752°F   400°C ±2°C		660°F   350°C
DIRECTION OF FLOW	Multi-directional	Multi-directional	Bi-directional	
TRANSPORT SYSTEM	Sweeper Bar   Walking Beam (WB)	Sweeper Bar   Walking Beam (WB)	Belt   Robot	Manual
AUTOMATION	SMEMA   SECS/GEM	SMEMA   SECS/GEM	SMEMA   SECS/GEM	None
MINIMUM O <sub>2</sub> LEVEL (PPM)	10	10		Open Air

<b>SUBSTRATE CAPACITY</b>				
MIN/MAX DIMENSIONS – INCH (CM)	No min 12 x 3.9 (31 x 10) L x W max	No min 12 x 3.9 (31 x 10) L x W max	4.9 (125) L x W min 11.8 (300) L x W max	No min 8 (20) L x W max
MAXIMUM HEIGHT – INCH (CM)	4 (101)	4 (101)		
MAXIMUM WEIGHT – LBS (KG)	1 (0.45) if all zones used	1 (0.45) if all zones used	1 (0.45)	20 (9.1)

<b>FACILITY REQUIREMENTS</b>				
INPUT VOLTAGE (VAC)	220   380	220   380	115   220   380	115   220
INPUT AMPS RMS (A)	≤50 @ start-up ≤25 @ steady state	≤70 @ start-up ≤35 @ steady state	≤12 @ start-up ≤6 @ steady state	≤2.1
SYSTEM POWER (KW)	11 @ start-up ≤5.5 @ steady state	17 @ start-up ≤8.5 @ steady state		≤1.2
TOTAL COVER GAS RATE (CFM)	≤5.8	≤5.8		
COOLING WATER FLOW (GPM)	≤2	≤2		
DIMENSIONS (W x D x H)	38 x 46 x 54 inches 97 x 117 x 137 cm	38 x 72 x 56 inches 97 x 183 x 142 cm	41 x 42 x 41 inches 104 x 107 x 104 cm	12 x 18 x 8 inches 31 x 46 x 20 cm