

# AEON

## TABLE-TOP BATCH PLASMA SYSTEM

**Aeon** is a compact standalone batch plasma cleaning system.

It includes all the subassemblies necessary to deliver excellent cleaning and surface modification results.

The features contained in this system allow a reliable and repeatable cycling of the plasma process to guarantee a smooth 24/7 operation.

**Aeon's** strength is its *flexibility*.

This system comes with different configurations to best adapt to your plasma process' needs. Its base configuration is complete with:

- A 50 kHz or 13.56 MHz RF system
- One mass flow controlled gas input line
- A high precision capacitive pressure gauge
- An all-aluminum chamber, nickel-coated for maximum performance
- A manual door
- A PLC controller with an LCD touchscreen user interface



### APPLICATIONS

- Cleaning of copper lead frames prior to wire bonding
- Organic decontamination prior to wire bonding
- Adhesion promoter prior to molding
- Adhesion promoter of die attach materials on lead frames or PBGA strips
- Flux removal from semiconductor packages or hybrids
- General activation, cleaning and decontamination

### PROCESS GASES

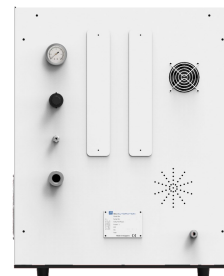
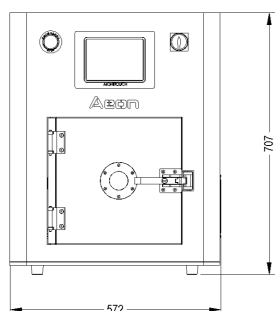
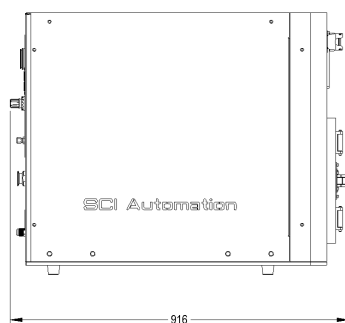
- Pure: Ar, He, O<sub>2</sub>, N<sub>2</sub>, H<sub>2</sub>
- Mixtures: N<sub>2</sub>/H<sub>2</sub>, Ar/O<sub>2</sub>, Ar/H<sub>2</sub> all in various mix ranges
- Other gases available on request

### SOFTWARE SPECIFICATIONS

- PLC - Omron
- User interface on screen
- Full manual and automatic operation
- File system for recipes

### OPTIONS

- H<sub>2</sub> generator
- Purge line
- 2<sup>nd</sup> gas line
- Dry vacuum pump (can be mounted internally)
- Oil vacuum pump (must be mounted externally)
- Extra shelves kit
- 300 W at 13.56 MHz RF generator with auto-tuner or 500 W, 50 kHz LF generator



<b>System name / type</b>	Aeon	Table-top batch plasma system
<b>Machine dimensions</b>	Footprint (mm)	572 x 916 x 707H
	Weight (kg)	110
<b>Shelves</b>	Quantity	2 grounded, 2 powered
	Dimensions (mm)	214 x 300
<b>Chamber</b>	Material	Nickel-coated aluminum
	Dimensions (mm)	300W x 390D x 300H
	Volume (L)	35.1
	Plasma type	Direct plasma, RIE
<b>RF generator</b>	<b>See options</b>	
<b>Automatic tuning network</b>	Type	L/C Network
	Functions	Auto tuning; preset tuning
	RF line	All silver-coated copper conductor
<b>Electrodes configuration</b>	Geometry	Planar
<b>Pressure gauge</b>	Type	Capacitive
	Range (mbar)	0.0001 to 1
<b>Gas lines</b>	Quantity	1
	Max flow rate (mL/min)	200
<b>Pumping system</b>	<b>See options</b>	
<b>Controller</b>	PLC	CPU; Digital I/Os; DAC and ADC
	User Interface	7.5" active touch screen
<b>System facilities</b>	Electrical power supply	Single phase 110-240V 50/60 Hz, 2.5KVA
	Process gas fittings	Swagelok 6 mm OD
	Process gas pressure	0.5 to 1.5 bar
	Process gas purity	99.995 % or better
	Exhaust port	25 mm OD
<b>Standards</b>	SEMI	S2, S8
		Cleanroom ready
	Others	ISO 9001
		CE
<b>Options</b>	Hydrogen generator	Up to 500 mL/min of H <sub>2</sub> with purity above 99.995 %
	RF generator	1000 W at 50 kHz or 300 W at 13.56 MHz
	Pumping system	No pump, oil pump (14.2 m <sup>3</sup> /h) or dry pump (20 m <sup>3</sup> /h)
	Extra shelf kit	2 ground electrodes, 2 power electrodes, 4 ground slides and 4 ceramic slides