



Advancing Plasma-Based Technologies

PLASMIONIQUE

À l'Avant-Garde des Technologies Plasma

Table-Top and Compact Systems Sputtering, Evaporation, PECVD, RIE and ALD



Advanced compact, versatile table-top systems for applications to thin film deposition, surface activation, and plasma etching or deposition

- ICP, CCP or MW plasma reactors, with option to include substrate biasing with ICP and MW plasma, for Compact version and MW plasma for the Table -Top
- Magnetron sputtering (RF or DC) with biasing option
- Seamless conversion of Plasma reactor to Sputtering source (vice-versa)
- Thermal evaporation boats and low temperature effusion cells
- Atomic Layer Deposition
- Sophisticated process control software with safety interlocks and alarms
- Data acquisition, remote access, touch screen or independent laptop included

www.plasmionique.com

info@plasmionique.com

Plasmionique Inc., 1650 boul. Lionel-Boulet Varennes, QC, Canada J3X 1S2
T: (514) 228 6931 T/F: +1 833 8PLASMA or 833 875 2762 (Toll Free)

Table Top Systems' Specifications

Chamber	<ul style="list-style-type: none"> • 5" to 8" diameter Stainless steel • Option for D-shaped chamber with hinged door. • Option for GLOVE-BOX version (compact series only)
Vacuum System	<ul style="list-style-type: none"> • Mechanical pump for vacuum in mTorr range • Turbo Option for microTorr base pressure • Required gauges for pressure measurement and control
Substrate/Sample Mount	<ul style="list-style-type: none"> • Samples up 1" to 6" diameter—Application dependent • Option for rotary and planetary • Options for Heating and biasing
Process Options: Magnetron Cathode Evaporation boats LT Effusion Cells Plasma Source (ICP or CCP) ALD (+ CCP option)	<p>Sputtering (MAGNION Series): Easily switched with plasma source.</p> <ul style="list-style-type: none"> ⇒ Circular target 1", 2" or 3" diameter, metallic or dielectric. Multi-cathodes (up to 3) configuration for 1" magnetrons ⇒ Operation with RF (13.56 MHz) or DC and Computer controlled switch for multi-cathodes configurations ⇒ Continuous or pulsed operation modes <p>Evaporation EVAD series</p> <ul style="list-style-type: none"> ⇒ Low Temperature Effusion cells, Resistive Heated Boats, etc. <p>Plasma Sources</p> <ul style="list-style-type: none"> ⇒ Inductively Coupled Plasma ⇒ Capacitively-Coupled Plasma (CCP) ⇒ Microwave Plasma <p>ALD</p> <ul style="list-style-type: none"> ⇒ Up to 4" substrate ⇒ Upto 350 °C
Gas Management	<ul style="list-style-type: none"> • One mass flow control included. • Two Precursor cylinder for ALD, or more (for Compact series) • Option for up to three MFC available • Upstream PID pressure control • Purge/vent line
Process Control System With Computer or integrated Touch Screen	<ul style="list-style-type: none"> • PLASMICON LabView®-based monitoring and control software • Intuitive graphical interface • Plotting and data-logging, recipe recall • Program mode for programming multi-step processes • Alarms and safety interlocks, emergency shut-off • Remote Assistance Interface
Supply Requirements	<ul style="list-style-type: none"> • Electrical: 115V/240 60Hz /50 Hz • Cooling water: min 0.3 gpm (1.0 L/min), 18-25 °C • Instrument air: max 60 psig • Process gases with regulators + Purge/vent gas, regulated • CSA certified, CE

www.plasmionique.com

info@plasmionique.com