



IP Plasma Solutions^{INC}

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Emerald One :

*"The BMW of Plasma Laboratory equipment".
We are sure you will find Emerald One the very
best on the market, to give you trouble free
actuate performance for reliable output in your lab.*

System Dimensions

84"H X 24"W X 35" D (with vac valve attached and light tower above)

Reactor Chamber

*Unimpeded work volume: 12X12X12 inches Primary plasma design
Front-loading door DF & UV -shielded view port
Dielectric isolation of electrodes (prevent interaction/chamber walls)*

Vacuum Pump Package

*23 cfm pump package standard pump lubricated with inert oil
External filtration with pressure gauge
and mist filter integrated to system optional.*

Control System

*PLC stores 15 recipes in nonvolatile memory,
each capable of up to 15 steps. Touch panel
input&display of all parameters Key switch selects
AUTOMATIC & MANUAL Programming modes Error
messages instantly displays & stores in nonvolatile
memory.*

*Out to tolerance places the system in HOLD awaiting operator interface
Three Mass Flow Controllers standard*

RF Generator Automatic Impedance Matching Network

0-600 watt, 13.56MHz, solid state generator/Automatic Impedance Matching Network/manual controller standard

Power Distribution module

*Distributes power to all components including vacuum pump
(If purchased through Plasma Solutions)*

*EMO (Emergency Off) shuts power off to all components including vacuum pump
(except PLC to allow error capture)*

*Key required to recover from EMO shut down prevents unauthorized use
Key override of interlocks (except EMO) for ease of maintenance*

Emerald One Requirements:

Dedicated 208/220 VAC 3P 30A 50/60 Hz (if powering vacuum pump from system)

*Compressed Air ¼ compression fitting regulated dry air with an inlet pressure greater than 60 psi
(to be supplied by user)*

*Adequately rated sealed exhaust line at line at 30 cfm connected to the pump with a minimum 1" line
(negative pressure preferred)*

5-15psi Gas (supplied by user with 1/4 swage input)

