## XT Series Residual Gas Analyzers



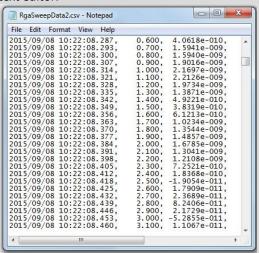
#### **Data Logging**

Data files can be saved in a Comma Separated Values (CSV) format for easy transfer to other programs .The CSV file contains plain text ASCII character fields for the Date and Time, the Mass number, and the Intensity. Data can be saved to a single file or in multiple files. The creation options for multiple files include Once per scan, On the hour, At midnight, or After N scans.



Record Data Tab

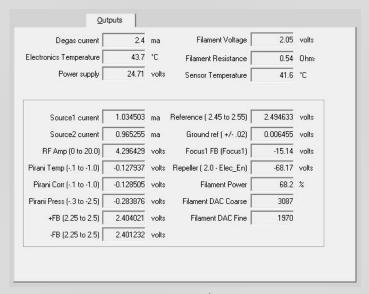
The data logging files can be saved in any local or shared network folder and the CSV files may be viewed or modified in any text editor.



CSV File Date and Time, Mass Number and Intensity Values

### **Diagnostic Outputs**

Although the XT Series is designed for reliable operation, useful diagnostic information is available at the click of the mouse. The Outputs tab shows real-time measurements of the filament voltage, emission current, electronics temperature, and much more. This information will quickly tell you of a filament problem or shorted probe.



**Outputs Tab** 

#### Performance and Value

The Extorr XT Series RGA it is the only vacuum gauge you will ever need. The combination of flexibility and competitive price make Extorr an outstanding vacuum measurement value.

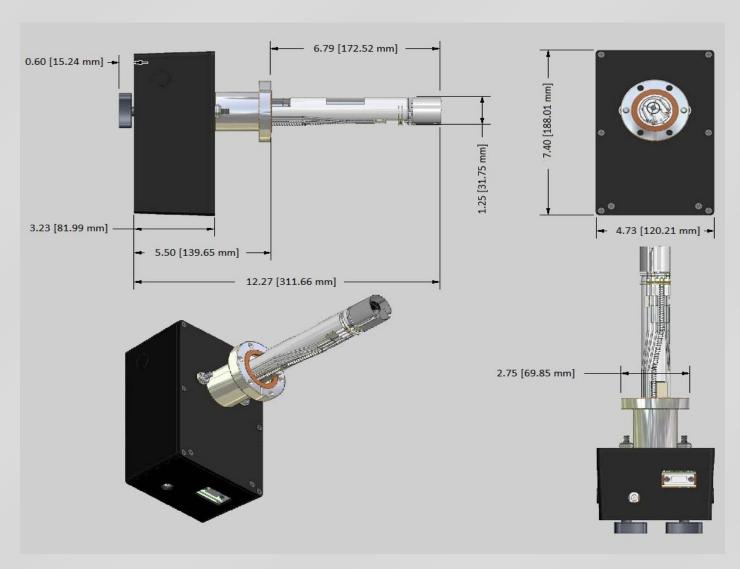
Extorr, Inc.

Phone: 724-337-3000

www.extorr.com

# XT Series Residual Gas Analyzers





RGA Dimensional Drawing, Inches [ mm ]

**Extorr, Inc.** Phone: 724-337-3000

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## XT Series Specifications



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XT100 1 to 100 amu Faraday cup (FC)
XT200 1 to 200 amu Faraday cup (FC)
XT300 1 to 300 amu Faraday cup (FC)
XT100M 1 to 100 amu Faraday cup (FC)

and Electron Multiplier (EM)

XT200M 1 to 200 amu Faraday cup (FC) and Electron Multiplier (EM)

XT300M 1 to 300 amu Faraday cup (FC)

and Electron Multiplier (EM)

Mass filter type Quadrupole

**Detector type** Faraday cup (FC), Standard

Electron Multiplier (EM), Optional

**Resolution** Better than 0.5 amu @ 10% peak height.

Adjustable to constant peak width

throughout the mass range.

**Sensitivity (A/Torr)** 5 x 10<sup>-4</sup> into Faraday cup. Measured

with  $N_2$  @ 28 amu with 1 amu full peak width, 10% height, 70 eV electron energy, 6 eV ion energy and 2 mA

electron emission.

Minimum detectable partial pressure

 $5\times10^{-12}\, Torr$  Faraday cup,  $5\times10^{-14}\, Torr$  Electron multiplier Measured with N $_2$  @ 28 amu with 1 amu full peak width, 10% height, 70eV electron energy, 6 eV ion

energy, and 2 mA electron emission.

**Operating range** UHV to Atmosphere

Pirani gauge,  $10^{-3}$  Torr to ATM Ion Gauge below  $10^{-2}$  Torr RGA operation below  $10^{-4}$  Torr

**Operating temperature** 

50 °C Electronics, 100 °C Probe

**Bakeout temperature** 

300 °C (Probe only, CCU removed)

**Total pressure measurement** 

 $10^{-3}$  Torr to ATM, Pirani gauge  $2 \times 10^{-10}$  Torr to  $10^{-2}$  Torr, B/A type

Ion Gauge

**Probe Materials** SS304, Kovar, Tungsten,

Alumina, Iridium, Copper, Nickel, Thoria, Platinum

**Ionizer Design** Open ion source, electron impact

ionization

**Filament** Dual thoria coated iridium with

firmware protection. Built-in 1 to 30W degas ramp-up. Field

replaceable.

**Electron energy** 11 to 150V, programmable

Ion energy 1 to 12V, programmableFocus Voltage 0 to 150V, programmable

Electron emission current

0.1 to 4 mA, programmable

**Probe Dimensions** 6.8" from flange face to

top of ionizer

Probe mounting flange

2.75" CF

Minimum tube I.D. 1.375"

**CCU Dimensions** 3.3" x 4.8" x 7.4", Easily separated

from probe for bakeout.

**CCU Extension** 6.2" from flange face with

mounting hardware.

**Warm-up time** Mass stability ± 0.1 amu after

30 minutes.

Computer Interface RS-232C, up to 115,200 baud,

or USB.

Minimum PC Requirements

PC running Windows 2000, XP, 7, 8, or 10 with 1024 x 768 VGA graphics, keyboard, mouse, CD ROM Drive, and 1 Unused USB or

RS-232C Port.

**Software** Included VacuumPlus Windows

based application. Requires Windows 2000, XP, 7, 8, or 10

**Power requirement** 24 VDC @ 2.5 Amps.

120/240 VAC adaptor included.

Weight 5 lbs. Total, Probe and CCU.

Extorr, Inc. 307 Columbia Road New Kensington, PA 15068 Phone: 724-337-3000

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