

## LINXON myRGA™

Simple, easy and affordable gas analyzer for general vacuum and R&D applications



# RELIABLE AND COST EFFECTIVE GAS ANALYSIS.

LINXON myRGA is a dependable residual gas analyzer (RGA) with the performance and price you need for gas analysis, air leak detection and contamination detection. This simple to use RGA features industry-leading minimum detectable partial pressure (MDPP), signal-to-noise ratio, and data collection speed. This gas analyzer delivers low overall costs of ownership and high mean-time-between-failures (MTBFs) for a cost-effective solution.

#### myRGA Provides Exceptional Value

LINXON myRGA is designed for use in general vacuum and R&D applications that require the robust performance of this proven RGA. It offers a high level of performance with your choice of 100 or 200 amu mass range. Additionally, myRGA can be equipped with either a standard Faraday Cup detector or with an optional electron multiplier, for applications which require the ability to monitor lower levels of gas concentrations.

The state-of-the-art ion source design used for the myRGA sensor incorporates two filaments in a combined anode, cathode and repeller assembly. The twin filament design includes a backup filament that allows for maximum uptime of the RGA. With myRGA you also get application specific filament choices (either tungsten for halogen containing processes or yttria-coated iridium for oxygen containing processes), ensuring that the process itself will not shorten the filament lifetime. Replacing the filament kit on myRGA is equivalent to replacing the entire ion source of traditional RGAs, providing cost savings that will significantly reduce the total cost of ownership.

Another key feature of the sensor is its ability to measure the total pressure in parallel to its mass spectrometer operation. This pressure measurement can be used to protect the filament from overpressure.

The new sensor design provides the added benefit of a field-replaceable electron multiplier (EM), if equipped. You can quickly replace the EM on-site, during regularly scheduled maintenance. The new multiplier was also developed to provide both higher Faraday Cup

#### (FC) sensitivity and increased gain for longer lifetimes.



#### myRGA Advantages

- Low price gas analyzer for air leak detection and process monitoring at an exceptional value
- Straightforward operation: simple initial set-up due to intuitive software
- Minimal maintenance and easy, field-replaceable filament and ion source assemblies, and electron multiplier
- Simple integration options anyone can learn with the http interface and LabVIEW development kit
- Always in stock for fast delivery

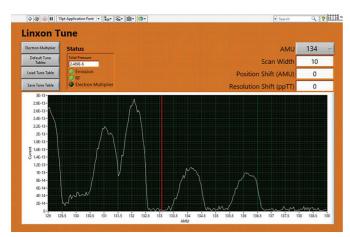
#### Simple Operation

With myRGA, there is no need to install software. The unit is operated by an integrated onboard web server via a web browser, totally independent from your operating system. Access myRGA via a PC, tablet or smartphone; the onboard web server will dynamically adapt to your screen size and resolution.

If you prefer to use LabVIEW to operate LINXON myRGA, a LabVIEW software development kit is included. Use the LabVIEW driver examples provided to tailor the software to your needs.

#### Features at a Glance

- Fast data collection
- Onboard web server
- LabVIEW software development kit
- TCP/IP Ethernet connectivity
- Dual filaments
- Field replaceable filament, ion source and electron multiplier
- Interchangeable sensors and electronics
- RoHS Compliant



LabVIEW

#### **Applications**

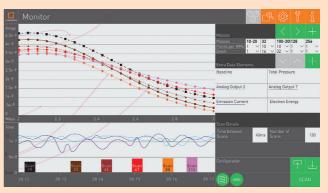
#### Vacuum Coating

Regardless of the type of PVD you utilize in your process (EB-PVD, IB-PVD, standard PVD), LINXON myRGA provides a view into your system unlike any other monitoring method; whether it's monitoring the process chamber for air leaks or your gas lines for contamination. If you need to find out why your chamber is not pumping down to its base vacuum, use the built-in leak check function to find the leak efficiently.

#### Heat Treating

Any low-pressure heat treating applications can benefit from the use of LINXON myRGA. If you are worried a particular gas will interact with your metal, LINXON myRGA can monitor for that mass and show you its presence and relative amount. LINXON myRGA can also be used for real-time leak monitoring or manual leak checking at base pressures.

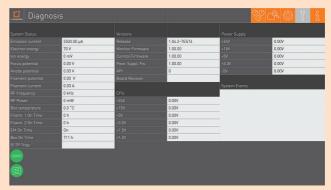
#### See What You Need to See



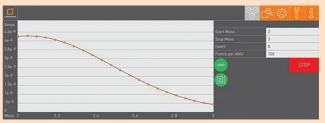
Monitor Scan



Tune Mode



Diagnostics Mode



Leak Check

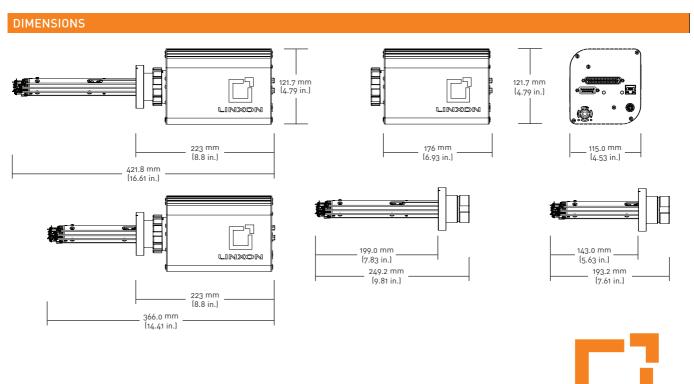
### LINXON myRGA

LINXON is a new value-priced brand of vacuum instruments, designed and built by INFICON, the leading provider of innovative instrumentation for the vacuum industry. LINXON instruments offer high performance at an unbeatable price, distributed via select local partners, and supported through video tutorials, extensive FAQs, factory-moderated user groups and more. LINXON products are ideal for customers who prefer to do things independently.

TECHNICAL DATA				
Туре	LIN100F	LIN100M	LIN200F	LIN200M
Sensor Length	14.3 cm	19.9 cm	14.3 cm	19.9 cm
Mass Range	100 amu	100 amu	200 amu	200 amu
Detector Type	FC	EM	FC	EM
Sensitivity (FC)	3E-4 amps/Torr	3E-4 amps/Torr	3E-4 amps/Torr	3E-4 amps/Torr
Sensitivity (EM)	NA	500 amps/Torr	NA	500 amps/Torr
Min. Detectable Partial Pressure [3]	2.6E-12 Torr	1.5E-14 Torr	2.6E-12 Torr	1.5E-14 Torr
Max. Sensor Operating Temp. (FC)	200°C	NA	200°C	NA
Max. Sensor Operating Temp. (EM)	NA	150 °C	NA	150 °C
Filament Type Option	Dual Y203/Ir filaments /Dual Tungsten filaments	Dual Y203/Ir filaments /Dual Tungsten filaments	Dual Y2O3/Ir filaments /Dual Tungsten filaments	Dual Y2O3/Ir filaments /Dual Tungsten filaments
Resolution [1]	<1 amu Wide	<1 amu Wide	<1 amu Wide	<1 amu Wide
Temperature Coefficient [2]	<1% per °C	<1% per °C	<1% per °C	<1% per °C
Zero Blast (@ mass 2)	<100 ppm	<100 ppm	<100 ppm	<100 ppm
Max. Operating Pressure	5E-4 Torr	5E-4 Torr	5E-4 Torr	5E-4 Torr
Max. Bakeout Temp.	300°C	300°C	300°C	300°C
Power Input	20-30 V (dc)	20-30 V (dc)	20-30 V (dc)	20-30 V (dc)

<sup>(1)</sup> at 10% of peak height

<sup>(3) 256</sup> millisecond dwell time



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<sup>(2)</sup> during an eight hour period, after a half hour warm up; in FC mode only