

PRA & WRA RESIDUAL GAS ANALYSERS (RGA)

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Our new RGA includes two variants: PRA & WRA, both come with simple and effective operation assuring high performance and efficiency.

Edwards PRA RGAs deliver the perfect balance of high end performance and accessibility. Available in four variants to suit your process needs, whether you just need a basic model or something with more sensitivity/range, the PRA is the perfect starting point for analysing your processes.

The WRA RGAs from Edwards are our top of the line models, with market leading specifications. Available in two variants 1-200 or 1-300 amu, you can measure a wide range of gasses/by-products from your processes. This is paired with increased sensitivity compared to the PRA to allow for greater accuracy from your measurements.

All RGAs have full Ethernet Protocol, which allows you to connect directly to your own PLC and are equipped with dedicated, easy-to-use software which allows you to track your process in real-time from your laptop and do detailed analysis of up to 16 different units.

For those wanting a snapshot view, the units have a unique on-board display which can show you the main gas types as well as the overall pressure of your system without having to connect via laptop.

Features and benefits

- Total pressure measurement
- Dual filament
- On unit display
- Customer replaceable parts
- Degas function
- Protection of Ion source and EM

Applications

PRA

- Residual gas analysis in high vacuum pumping equipment
- Gas analysis in R&D
- Gas analysis in Freeze drying
- Gas analysis in PV/FPD/Semi



WRA

- Residual gas analysis in UHV pumping equipment
- Analysis of organic materials
- Environmental tracking
- Gas impurity

TECHNICAL DATA AND ORDERING INFORMATION

	PRA100	PRA100S	PRA200	PRA200S
Mass range (amu)	1-100	1-100	1-200	1-200
Mass filter type	QMS	QMS	QMS	QMS
Detector type	Faraday cup	EM/Faraday cup	Faraday cup	EM/Faraday cup
Sensitivity (A/mbar)	1×10^{-5}	$400/1 \times 10^{-5}$	1×10^{-5}	$400/1 \times 10^{-5}$
Minimum detectable partial pressure (mbar)	1×10^{-10}	$1 \times 10^{-14}/1 \times 10^{-10}$	1×10^{-10}	$1 \times 10^{-14}/1 \times 10^{-10}$
Max operating pressure (mbar)	1×10^{-4}	1×10^{-4}	1×10^{-4}	1×10^{-4}
Filament material	Ir/Y2O3	Ir/Y2O3	Ir/Y2O3	Ir/Y2O3
Operating temp (°C)	40	40	40	40
Max analyser temp (°C)	120	120	120	120
Max bake out temp (elec removed) (°C)	250	250	250	250
Connection flange	DN40CF	DN40CF	DN40CF	DN40CF
Power input	DC24V +/-10% 50W	DC24V +/-10% 50W	DC24V +/-10% 50W	DC24V +/-10% 50W
Weight (kg)	2.6	2.84	2.6	2.84
IP	30	30	30	30
Serial communication	RS485	RS485	RS485	RS485
Resolution	M/DeltaM=1M(10%PH)	M/DeltaM=1M(10%PH)	M/DeltaM=1M(10%PH)	M/DeltaM=1M(10%PH)

	WRA200S	WRA300S
Mass range (amu)	1-200	1-300
Mass filter type	QMS	QMS
Detector type	EM/Faraday cup	EM/Faraday cup
Sensitivity (A/mbar)	$400/2.5 \times 10^{-4}$	$400/2.5 \times 10^{-4}$
Minimum detectable partial pressure (mbar)	$1 \times 10^{-15}/1 \times 10^{-11}$	$1 \times 10^{-15}/1 \times 10^{-11}$
Max operating pressure (mbar)	1×10^{-4}	1×10^{-4}
Filament material	Ir/Y2O3	Ir/Y2O3
Operating temp (°C)	40	40
Max analyser temp (°C)	250	250
Max bake out temp (elec removed) (°C)	300	300
Connection flange	DN40CF	DN40CF
Power input	DC24V +/-10% 50W	DC24V +/-10% 50W
Weight (kg)	3.21	3.21
IP	30	30
Serial communication	RS485	RS485
Resolution	M/DeltaM=1M(10%PH)	M/DeltaM=1M(10%PH)

Product description	Order number
WRA200S	D05002202
WRA300S	D05002302
WRA-S analyzer tube	D05002015
WRA200S/300S filament kit	D05002014
WRA200S/300S ion source	D05002013
WRA200S/300S SEM	D05002012
PRA100	D05001101
PRA100S	D05001102
PRA200	D05001201
PRA200S	D05001202
PRA100/200 analyzer tube	D05001016
PRA100S/200S analyzer tube	D05001015
PRA ion source	D05001013



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