



Specification Comparison Old and New Rapidox 1100Z

PROPERTY	RAPIDOX 1100Z-18 SPECIFICATION (OLD)	RAPIDOX 1100Z SPECIFICATION (NEW)
Supply Voltage	90-260VAC, 50/60Hz	90-260VAC, 50/60Hz
Power consumption	100W (max)	30W (max)
Analyser dimensions	250mm X 263mm X 150mm	250mm(W) X 270mm(D) X 160mm(H) (Height with feet and handle is 200mm)
Weight	3.5 kg	3.5 kg
Warm up time	4 - 5 minutes at 20°C	1 – 2 minutes at 20°C
Display	16 x 2 character (9mm) back lit LCD	20 X 4 character (5mm) ultra-bright OLED display
Display Options	O ₂ and Pressure shown on the display	O ₂ , Pressure, Balance gas (eg N ₂) and date and time all displayed simultaneously
Normal ambient operating temperature	5-35°C	5-35°C
Normal ambient operating pressure	900 – 1100 mbars absolute	900 – 1100 mbars absolute
Sensor Range	1ppm to 100% O ₂	0.5ppm to 30% O ₂
Max. gas temperature on inlet	60°C	60°C
Balance Gas	Can be displayed in terms of N ₂ content in place of the O ₂ reading	Balance gas can be displayed optionally in terms of nitrogen, argon or just as a balance
Cleaning Mode	Fixed basic sensor clean on start up	Sensor cleans can be enabled, disabled or activated on request
Sensor Type	Traditional tubular zirconia sensor	Updated high speed response planar zirconia sensor
Sensor Accuracy	±1% of the actual measured oxygen content or 0.5ppm whichever is the greater ¹	±1% of the actual measured oxygen content or 0.5ppm whichever is the greater ¹
Outputs: O ₂ & pressure	-10V (user-programmable) into minimum 5kΩ	0-10V (user-programmable) into minimum 5kΩ
O ₂ & pressure	4-20mA current loop (user-programmable) into maximum 500Ω	4-20mA current loop (user-programmable) into maximum 500Ω

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Digital Outputs	RS232 or RS485 - data streamed on demand Modbus-RTU protocol on request	RS232 or RS485 - data streamed on demand Modbus-RTU as standard
Sample Pump	Long Life vacuum pump (variable flow 0 - 1.2 l.min ⁻¹) with power switch on rear panel ² .	Long Life vacuum pump (variable flow 0 - 1.2 l.min ⁻¹) with power switch on rear panel ² .
Max pressure on the inlet with the pump switched off	+/- 1000mbar (assuming an unrestricted outlet to room air)	+/- 1000mbar (assuming an unrestricted outlet to room air)
Calibration	Requires 2 or 3 user-selectable gas compositions (air is default plus another two)	Up to 5 separate calibration points can be selected by the user. A minimum of 3 are required for a calibration
Calibration Quality	n/a	A live R-Squared reading is displayed during calibration to indicate the quality of the calibration curve
Password Feature	Basic password to lock users out of the menu system	Updated password function allows partial or full menu lock out
System Info	Basic firmware information displayed	Fully updated menu with cal data, alarm history, run time history, local ambient condition monitoring
Software	Basic data-logging and live time graphing software	Fully updated software including: <ul style="list-style-type: none"> - Simple calibration procedure - Scalable OLED emulator - High Speed Data logging - Multiple live time graphs - More user settings for graphs - Updated comprehensive online help

¹ This level of accuracy is only guaranteed when a three-gas calibration has been achieved with a resulting r-squared value of at least 0.999.

² Power switch is not fitted to "ZR" coded machines.