Technical Specification Summary



On-line Water Radioactivity Monitor



Wilma Benchtop System	
Dimensions (mm)	520 (W) x 400 (D) x 300 (H) mm
Mass (kg)	30
Power	100 - 240 Vac Internal power supply output rated at 24 Vdc, 6.5A (150 W max.)
Interfaces	USB Ethernet option Output to external data logger (e.g. MODBUS) option
Detector Geometry	2 x 28 mm diameter PMTs operating in coincidence mode
Detector Shielding	10 mm Pb phosphor bronze Additional Pb shield options
Integral Scintillation Cocktail Pump Flow Rate Range (ml/min)	<0.5 to 30
Integral Sample Pump Flow Rate Range (ml/min)	<0.5 to 30
Integral Wash Solution Pump Flow Rate Range (ml/min)	<0.5 to 30
Integral Standard Solution Pump Flow Rate Range (ml/min)	<0.5 to 30
Counting Window Discrimination	Two counting channels, 0-9999 mV pulse amplitude range
Background count rate (open window, luminescence subtracted) (cpm)	<15
Background count rate (open window, non-subtracted) (cpm)	<40

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³ H Counting Efficiency (unquenched, %)	>50
¹⁴ C Counting Efficiency (unquenched, %)	>90
Flow Cell Ranges	5 ml bulk liquid cell as standard Coiled liquid and packed solid scintillator cells available as options (100 μl to 1 ml)
Flow Options	Discrete sampling mode (default) Continuous sampling mode (optional) Automated wash cycle Automated standard introduction
External I/O	4 x USB Temperature sensor (optional) HDMI Ethernet Network Port
Control Software	Integrated Wilma software and user interface via industrial fanless touchscreen PC
Fluid Handling	Liquid manifold with integral switching valves Standard bulkhead tubing fittings for 1/8" (3.2 mm) OD tubing and M6 metric thread
Options	Multichannel analyser (MCA) for LSC spectra



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