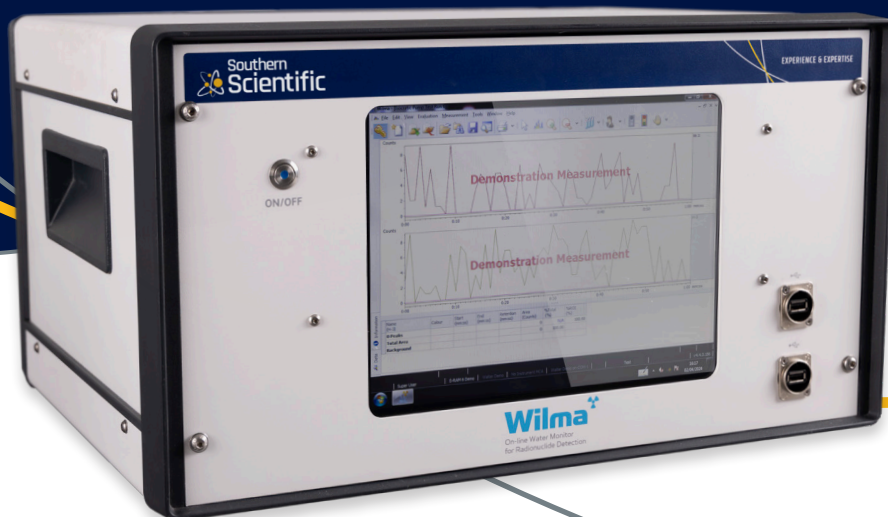


# Product Datasheet

# Wilma

## On-line Radioactivity Monitor



### Specifications for Wilma Monitoring System

<b>Dimensions (mm)</b>	520 (W) x 400 (D) x 300 (H) mm (Water Monitor) 850 (W) x 500 (D) x 1230 (H) mm (Tritium in Air Monitor)
<b>Mass (kg)</b>	30 (Water Monitor) 105 (Tritium in Air Monitor, with bubbler)
<b>Power</b>	100 - 240 Vac Internal power supply output rated at 24 Vdc, 6.5A (150 W max.)
<b>Interfaces</b>	USB Ethernet option Output to external data logger (e.g. MODBUS) option
<b>Detector Geometry</b>	2 x 28 mm diameter PMTs operating in coincidence mode
<b>Detector Shielding</b>	10 mm Pb phosphor bronze Additional Pb shield options
<b>Integral Scintillation Cocktail Pump Flow Rate Range (ml/min)</b>	<0.5 to 30
<b>Integral Sample Pump Flow Rate Range (ml/min)</b>	<0.5 to 30
<b>Integral Wash Solution Pump Flow Rate Range (ml/min)</b>	<0.5 to 30
<b>Integral Standard Solution Pump Flow Rate Range (ml/min)</b>	<0.5 to 30
<b>Counting Window Discrimination</b>	Two counting channels, 0-9999 mV pulse amplitude range
<b>Background count rate (open window, luminescence subtracted) (cpm)</b>	<15

## Specifications for Wilma Monitoring System

<b>Background count rate (open window, non-subtracted)</b> (cpm)	<40
<b><sup>3</sup>H Counting Efficiency</b> (unquenched, %)	>50 (>15% for quenched samples)
<b><sup>14</sup>C Counting Efficiency</b> (unquenched, %)	>90
<b>Flow Cell Ranges</b>	5 ml bulk liquid cell as standard Coiled liquid and packed solid scintillator cells available as options (100 µl to 1 ml)
<b>Flow Options</b>	Discrete sampling mode (default) Continuous sampling mode (optional) Automated wash cycle Automated standard introduction
<b>External I/O</b>	4 x USB Temperature sensor (optional) HDMI Ethernet Network Port
<b>Control Software</b>	Integrated Wilma software and user interface via industrial fanless touchscreen PC
<b>Fluid Handling</b>	Liquid manifold with integral switching valves Standard bulkhead tubing fittings for 1/8" (3.2 mm) OD tubing and M6 metric thread
<b>Options</b>	Multichannel analyser (MCA) for LSC spectra

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