

Specifications for Respirometer

Sl. #	Attribute	Required specification
1.	Respirometer Unit	Respirometer system consisting of oxygen sensor/ electrode chamber, stirrer and plunger unit with base and output device connected to display.
2.	Purpose	To measure Liquid phase oxygen uptake/ respiration measurement
3.	No. of Channels	2
4.	Reaction chamber / cuvette volume	In the range of 1ml to 4 ml
5.	Oxygen electrode	Clark type polarographic / fluorescent oxygen sensing electrode
6.	Sample volume	Adjustable using variable plunger assembly
7.	Stirrer	Integral miniature stirrer with speed controller (100 - 1000 rpm)
8.	Temperature control	2 to 40°C using thermo regulated circulatory water bath/pettier controlled
9.	Response time	2-5 s
10.	Data acquisition and analysis	Windows based software for data acquisition and analysis
11.	Bidirectional communications for instrument	RS 232 /USB 2.0 or 3.0
12.	Provision for injection of substrate/ inhibitor into sample chamber	
13.	Power system for connecting multiple channels in series	
14.	Simultaneous measurement of input signal viz. temperature is made possible.	
15.	Quality control certification	CE or any appropriate International certification mandatory
15	Manufacturer warranty	Minimum one year
16	<p>Accessories to be supplied with</p> <p>All necessary accessories for the setting up of a functional system should be supplied with the instrument.</p> <p>2 nos. of calibrated syringes of volumes 10, 50 and 100 µl each to inject and substrate/ samples into the sample chamber</p> <p>1100 VA UPS with 2 x 7 AH battery to provide 30 minutes backup or more</p>	