

Selection Guide

# Agilent Seahorse XF Instruments



Agilent Seahorse XF Pro Analyzer



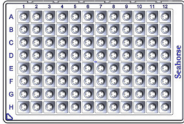
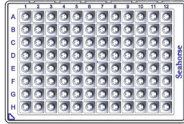
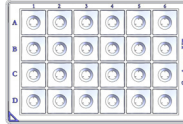

Agilent Seahorse XFe96 Analyzer



Agilent Seahorse XFe24 Analyzer



Agilent Seahorse XF HS Mini Analyzer

Plate format				
Microchamber volume	2.28 $\mu$ L	2.28 $\mu$ L	5.65 $\mu$ L	2.28 or 0.71 $\mu$ L
Controller computer	Windows 10 (64-bit) with touch-screen display, connected to the analyzer	Windows 10 (64 bit) with touch-screen display, connected to the analyzer	Windows 10 (64 bit) with touch-screen display, connected to the analyzer	Integrated full-color, streamlined touch-screen interface with Windows 10 (64 bit), easy to set up and run
Software	Wave Pro Controller software includes preloaded templates for quick experimental design, automatically calculates rates in real time, and provides exclusive cutting-edge data analysis Tools (e.g., multi-file analysis, dose-response curves, Z'), advanced template import feature and dose-reponse experiment setup	Wave Controller software includes preloaded templates for quick experimental design, automatically calculates rates in real time, and provides basic tools for data interpretation as well as export options		Integrated software guides setup for standard assays, automatically calculates rates in real time, and provides simple file transfer for data analysis.
Best for	<ul style="list-style-type: none"> <li>Phenotypic screening</li> <li>Testing many conditions at once</li> <li>Dose-response studies</li> </ul>	<ul style="list-style-type: none"> <li>Phenotypic screening</li> <li>Testing many conditions at once</li> </ul>	<ul style="list-style-type: none"> <li>Islets</li> <li>Small model organisms</li> </ul>	<ul style="list-style-type: none"> <li>Quantity-limited primary cells</li> <li>Low-respiring cell types</li> <li>T cell subsets</li> </ul>
General instrument performance	<ul style="list-style-type: none"> <li>Highest-throughput analyzer</li> <li>Experimental flexibility</li> <li>Validated for hypoxia</li> <li>Automation enabled</li> <li>Advanced thermal control to reduce edge effect when used with XF Pro M plates</li> </ul>	<ul style="list-style-type: none"> <li>Highest-throughput analyzer</li> <li>Experimental flexibility</li> <li>Validated for hypoxia</li> </ul>	<ul style="list-style-type: none"> <li>Validated for hypoxia</li> </ul>	<ul style="list-style-type: none"> <li>Pair-wise comparison</li> </ul>
Measurement performance	<ul style="list-style-type: none"> <li>High Sensitivity</li> <li>Verified optimal measurement range (OCR of 13 to 350 pmol/min, PER of 50 to 950 pmol/min)</li> <li>Tight error in low ranges down to OCR of 13 pmol/min</li> <li>Test up to 80 groups per plate (maximum for screening at n = 1)</li> </ul>	<ul style="list-style-type: none"> <li>Good Sensitivity</li> <li>Tight Error in ranges down to approximate OCR of 20 pmol/min</li> <li>Recommended up to 16 groups (n = 6)</li> </ul>	<ul style="list-style-type: none"> <li>Good Sensitivity</li> <li>Tight Error in ranges down to approximate OCR of 40 pmol/min</li> <li>Recommended up to 6 groups (n = 3)</li> </ul>	<ul style="list-style-type: none"> <li>Highest Sensitivity</li> <li>Tight error in low ranges down to OCR of 7 pmol/min when combined with HS Miniplate</li> <li>Recommended up to two groups (n = 3)</li> </ul>

	Agilent Seahorse XF Pro Analyzer	Agilent Seahorse XFe96 Analyzer	Agilent Seahorse XFe24 Analyzer	Agilent Seahorse XF HS Mini Analyzer
Other features	<ul style="list-style-type: none"> <li>– Quality Control Assurance</li> <li>– Developed under ISO9001 certified compliant process</li> <li>– IQ and AIQ certified instrument performance</li> <li>– Automated data QC</li> </ul>	–	–	<ul style="list-style-type: none"> <li>– Developed under ISO9001 certified compliant process</li> <li>– Automated data QC</li> </ul>
	– Least expensive cost/well	– Least expensive cost/well	–	–
	– Suitable for spheroids	– Suitable for spheroids	– Larger surface area suitable for large study models (islets, adipose)	– Suitable for use with limited biomaterial
	– Compatible with cutting edge XF T cell metabolic profiling and XF Mito Tox assays and analysis	– Compatible with XF T cell metabolic profiling assays and analysis	–	– Compatible with T cell metabolic profiling assays and analysis
Compatible plate types	<ul style="list-style-type: none"> <li>– XF Pro M plate</li> <li>– XFe96/XF Pro plate</li> <li>– XFe96/XF Pro PDL plates</li> <li>– XFe96 spheroid plate</li> </ul>	<ul style="list-style-type: none"> <li>– XFe96/XF Pro plate</li> <li>– XFe96/XF Pro PDL plates</li> <li>– XFe96 spheroid plate</li> </ul>	<ul style="list-style-type: none"> <li>– XF24 V7 plate</li> <li>– XF24 V28 plate</li> <li>– XF24 islet capture plate</li> </ul>	<ul style="list-style-type: none"> <li>– XFp miniplate</li> <li>– XF HS miniplate</li> <li>– XFp PDL miniplate</li> <li>– XF HS PDL miniplate</li> </ul>

### All Agilent Seahorse XF Analyzers feature:

- Compatibility with adherent and suspension cells as well as isolated mitochondria and nonmammalian samples
- Ability to perform up to four independent injections per well with automatic mixing
- Automatic calculation of oxygen consumption rate (OCR) and extracellular acidification rate (ECAR)
- Simultaneous measurement of OCR and ECAR in the same well
- Sensitivity for small sample sizes
- Ability to quantify mitochondrial respiration, glycolysis, and ATP production rates
- Label-free detection in live cells, in real time
- Windows-compatible desktop software (Wave) for viewing and exporting your Agilent Seahorse XF data
- Cloud-based Seahorse Analytics: accessible, streamlined tools to analyze and interpret your XF data

**Note:** The Seahorse XFe96 analyzer has been replaced by the new XF Pro analyzer. For more information, please contact Agilent Technical Support at [cellanalysis.support@agilent.com](mailto:cellanalysis.support@agilent.com) or ask your local Product Specialist.

If you are interested in trading in your older Seahorse or other Agilent instrument to receive credit for a new Seahorse Analyzer, please visit the [Agilent Services](#) website or ask your local Product Specialist.

[www.agilent.com/chem/discoverXF](http://www.agilent.com/chem/discoverXF)

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