

How to Select the Appropriate Osmometer - Biotech & Industry

It's easy to select the best osmometer for your laboratory needs

There are a variety of factors that go into choosing the right osmometer including the number of samples tested daily and the required level of automation. No matter which instrument you choose, all Advanced Instruments Osmometers utilize Freezing Point Technology which is considered the "Gold Standard" osmolality determination method.

All models support

Pharmacopeia testing
guidelines compliance



Osmometer-
Biotech & Industry:

A₂O[®] Advanced
Automated
Osmometer

OsmoTECH[®] PRO
Multi-Sample
Micro-Osmometer

OsmoTECH[®] XT
Single-Sample
Micro-Osmometer

OsmoTECH[®]
Single-Sample
Micro-Osmometer

Workflow Features				
Best for labs with daily sample processing needs of	>10/day	>10/day	1-10/day	1-10/day
Sample volume	100 µL	30 µL	20 µL	20 µL
Sample introduction	Automated liquid handling sample cup	Sample cup	One-step direct	One-step direct
Operating range (mOsm/kg H ₂ O)	0-4,000	0-2,000	0-4,000	0-2,000
Test time (seconds)	180	90	≤ 150s in low range; ≤ 190s in high range	90
Compliance Support Features				
Supports 21 CFR Part 11 & EU Annex 11 compliance		●	●	●
Supports pharmacopeia testing guidelines compliance	●	●	●	●
Electronic signature (Review & approve)			●	
Instrument Features				
Integrated barcode scanner	●	●	●	●
Printer	●	● ¹	● ¹	● ¹
Multi-language, touchscreen display	●	●	●	●
Username & password capability	●	●	●	●
Multi-sample capacity	●	●		
Automated cleaning between samples	●	●		
Automated sample pipetting	●			
Data Management Features				
TCP/IP	●	●	●	●
USB	●	●	●	●
Webserver for remote data viewing		●	●	●
OPC-UA, Network share		●	●	●
Database backup		●	●	●
Data Format	.csv	.csv & pdf	.csv & pdf	.csv & pdf
Levels of users access	2 Levels	3 Levels	3 Levels	3 Levels

¹ Printer (dot-matrix) is sold separately