

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 | 0-4,200 | 0-2,000 |
| Test time (seconds) | 180 | 90 | ≤ 150s in low range; ≤ 180s 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