

FastTrack™ UV/VIS Spectroscopy

Designed for Life Sciences



Accurate micro-volume measurements

The UV5Nano only requires 1 μL of sample for reliable measurements. The pure sample is pipetted on the measuring surface and the arm is automatically locked to a precisely defined pathlength. Measurement accuracy is ensured and errors are avoided as the sample does not need to be diluted.



Measure wide concentration ranges fast

The UV5Nano automatically measures at two precisely defined pathlengths allowing a wide concentration range to be covered. Samples of dsDNA with concentrations of 6 $\text{ng}/\mu\text{L}$ to 15.000 $\text{ng}/\mu\text{L}$ can be measured without further dilutions within 2 seconds per pathlength.



Powerful compactness

The UV5Nano combines two instruments in one for microvolume and cuvette based measurements. In the UV5Bio cuvette holders and CuvetteChanger are positioned in the easily accessible open sample area. Both instruments fit a Note-pad footprint.



Direct Bio measurements and methods

Bio UV/VIS applications can be started simply as direct measurements. Pre-verified METTLER TOLEDO Bio methods can be used for instant analyses or adapted with the intuitive editor to meet specific automation workflows. Both direct measurements and dedicated methods can be started by One Click™ shortcuts.



reddot design award
winner 2016



UV5Bio and UV5Nano UV/VIS Spectrophotometers

UV/VIS Excellence Line for Life Sciences

The UV5Bio and UV5Nano Excellence instruments optimize spectroscopic workflows in life sciences – FastTrack™ technology enables speedy and reliable measurements, with One Click™ touchscreen operation becomes intuitive and efficient and LockPath™ technology ensures accurate micro-volume measurements. The UV5Bio provides standard cuvette measurements while UV5Nano combines micro-volume and cuvette measurements. Both are specialized for Life Sciences applications thanks to:

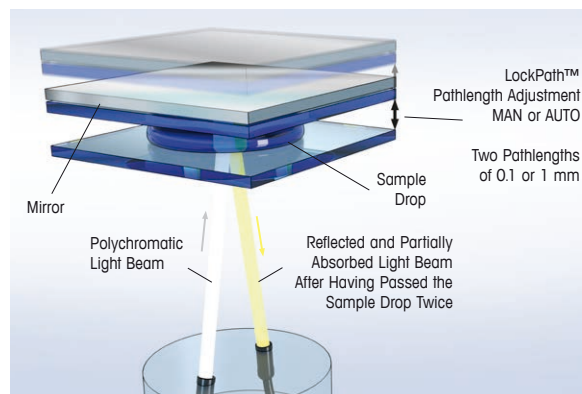
- Accurate micro-volume measurements
- Wide concentration measuring range
- Powerful compactness
- Direct Bio measurements and specific methods

LockPath™ Technology

Reliable Micro-Volume Measurement

Avoid errors, secure accuracy

- Measure directly on the integrated optical cell thanks to ingenious light deflection off the mirror in the arm.
- Repeatable and exact automatic pathlength adjustment at 0.1 and 1 mm
- Exclusion of pathlength drift thanks to the rugged, patented design - expensive recalibration and downtime are excluded
- Secure locking of the arm during the measurement at the selected pathlength
- No drying out of sample during measurement for increased repeatability
- Convenient sample pipetting supported by the 90 degree arm position



LockPath™ technology
Lock the pathlength and secure your measurement

Feature and technical comparison UV5Bio/UV5Nano Excellence Line

| | | UV5Bio | UV5Nano |
|---------------------------------------|--|-----------------|-----------------|
| FastTrack™ technology | Pulsed Xenon flash lamp, CCD array detector | • | • |
| LockPath™ technology | Automatic pathlength adjustment for micro-volume measurement | | • |
| Optical performance | Wavelength range [nm] | 190–1100 | 190–1100 |
| | Resolution (toluene in hexane abs.) | > 1.5 | > 1.7 |
| | Wavelength accuracy (holmium oxide) [nm] | ± 1.0 | ± 1.0 |
| | Photometric accuracy (potassium dichromate) [A] | ± 0.01 | ± 0.01 |
| | Stray light at 198 nm (potassium chloride) [A] | > 2 | > 1.7 |
| | Minimal scan time full range [s] | 1 | 1 |
| One Click™ UV/VIS spectroscopy | Shortcuts per user | 12 | 12 |
| Automation | Peristaltic pump FillPaMini | • | • |
| | CuvetteChanger | • | |
| | CertiRef™ automatic performance verification | • | |
| Applications & Methods | Direct measurements | • | • |
| | Pre-defined METTLER TOLEDO methods | > 12 | > 12 |
| | Method editor | • | • |
| | Max. number of methods | 50 | 50 |
| Results | Number of results stored in instrument | 50 | 50 |
| | Result storage on USB stick | • | • |
| | Result transfer via Ethernet to remote PC | • | • |
| PC software | LabX® UV/VIS software | • | • |
| Languages | English/German/French/Spanish/Italian/Chinese/Russian/Portuguese | • | • |
| Connectivity | USB memory stick storage of results at terminal | • | • |
| | USB devices (bar code reader, printer) | • | • |
| | Ethernet (PC, network printer) | • | • |
| Terminal | 7" QVGA Color TFT 800 x 400 resolution touch sensitive screen | • | • |
| Instrument dimensions | Width x depth x height (without terminal) [mm] | 208 x 255 x 228 | 208 x 255 x 217 |
| | Weight incl. terminal [kg] | 6.4 | 7.2 |



Mettler-Toledo AG, Analytical
CH-8603 Schwerzenbach, Switzerland
Tel. +41 44 806 77 11
Fax +41 44 806 72 40

www.mt.com/UV-VIS

For more information

Subject to technical changes
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