Frequently Asked Questions (FAQs)

NanoQ Lite

Category	Frequently Asked Questions	Answers
1. Sample Result Concerns	What are the sample size requirements for NanoQ Lite?	The volume range from 1.5 µl to 2 µl is recommanded. If it exceeds 2 µl, even samples with low surface tension properties can be measured. Less than 1 µl is not recommended.
	What biomolecules can be analyzed with NanoQ Lite?	NanoQ Lite is designed to perform concentration analysis on purified dsDNA, RNA, ssDNA and proteins whose absorption varies depending on the concentration at 260 nm or 280 nm.
	Should nucleic acids be purified before measuring?	Yes, it is necessary. Any biomolecule absorbs 260 nm light, which can affect the overall absorption of the sample.
	Can I quantify my protein using NanoQ Lite?	Available. Analysis of purified proteins is possible using Protein, BSA, and IgG modes.
	How can I check the previous measurements stored on the NanoQ Lite?	If you click the [Data] menu, you can check the list of saved data.
	I am using colorimetric methods (e.g. Bradford, BCA, etc.) to detect the protein concentration in my cell extract. Can samples be measured using the A280 method on the NanoQ Lite?	No. NanoQ Lite does not provide a chromaticity analysis method. NanoQ Lite uses only 260, 280 and 600 nm LEDs. To use the chromaticity analysis method, please use NanoQ.
	Is it possible to prevent sample carryover by simply wiping the surface of the pedestal?	Just wiping with lint-free lab wipes is very effective.
	Does the sample size affect the measured concentration results?	No. The concentration result is independent of the sample size. The concentration of the sample is determined by the Beer-Lambert law.
	What is a suitable blank solution?	The blank solution should be the solvent used to dissolve the sample. Keep the sample, pH, and ionization tendency constant.
	Why do negative absorbance values appear?	When measuring blank, the buffer may have a higher absorbance than the sample, or the surface of the pedestal may be contaminated. Clean the surface of the pedestal properly, and measure the new buffer with a blank.
	Where is the spectrum?	NanoQ Lite does not provide a spectrum measurement mode. NanoQ Lite can only measure absorbance and transmittance at 260, 280 and 600 nm.
	How to clean the window?	Do not use detergent or isopropanol. Wipe with a regular lint-free wipe. For high concentration samples, drop water or buffer before wiping.
	Are there any solvents that damage the pedestal measurement surface?	Since a quartz window is attached to the NanoQ Lite pedestal, most solvents generally used in life science are applicable. Even diluted acid is no problem as long as you wipe it off immediately after measurement. However, hydrofluoric acid (HF) may cause damage to the quartz window, so do not use it for pedestal in any form.
	What is the optical path length used for the measurement and the user needs to perform calculations related to the path length?	NanoQ Lite is equipped with automatic light path setting technology. By automatically setting the appropriate light path according to the concentration, more accurate data can be measured. The measured absorbance is standardized and displayed based on a 10 mm light path.

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2. Hardware Issues	How long does the NanoQ Lite light source last?	NanoQ Lite uses LED as a light source. The lifetime of the LED is guaranteed to last as long as the life of the equipment.
	Does the LED stay on or is it only lit when taking measurements?	NanoQ Lite turns on the LED during measurement and turns off the LED after completion.
3. Connectivity Issues	Does the NanoQ Lite need a computer to work?	No. NanoQ Lite is a device that can be operated independently without a PC. The measured data is stored in the instrument memory and can be transferred to a computer.
	How can I transfer the data stored on the NanoQ Lite?	You can copy entire data to USB by clicking the USB Copy button. When connected to a PC using a B-type USB cable, NanoQ Lite is recognized as a removable disk, and data can be easily accessed through Windows' file explorer.
	What happens to the sample data if the data is not transferred to the USB device when measuring?	Measured data is saved in the internal memory only by pressing the [Save] button. This has the advantage of preventing unnecessary data tracking and selectively storing desired data. Saved data can be transferred to USB or PC. Up to 999 can be stored in the internal memory.
	Can I connect my computer to the NanoQ Lite?	Yes it is possible. If you connect a computer to the instrument, the measured data can be transferred directly to the computer. However, you cannot control the NanoQ Lite from your PC.

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