ACCURIS INSTRUMENTS

Smart·Q™ Mini

Quantitative Fluorometer

Accurate, sensitive, and precise quantification of DNA, RNA, and Protein

DNA

RNA

Protein



- **Compact Design**: 3.27 x 3.27 in. footprint
- **Two-channels**: Blue (470 nm) and red (620 nm) excitation wavelengths
- **Fast and Accurate**: Quantification in under 5 seconds
- **Minimal Sample Input**: Requires as little as 1 µL
- **Easy to Operate**: Control via a Bluetooth®-connected tablet or smartphone (iOS or Android)

Smart-Q Mini

The Smart-Q Mini is a one-of-a-kind, benchtop fluorometer for quantitative measurement of DNA, RNA, ssDNA, and protein. The instrument is compact and conveniently operated via a smartphone or tablet and provides accurate results in under 5 seconds.



Smart-Q Mini App

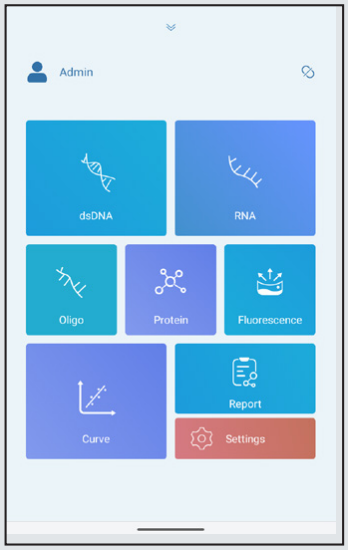
The app delivers a highly intuitive yet powerful interface for assay selection, parameter configuration, and real-time results visualization. Seamless connectivity and data export capabilities allow for integration into advanced laboratory workflows. Preloaded, validated quantification protocols and standard curves for DNA, RNA, protein, and oligonucleotides eliminate the need for custom programming and reduce user-dependent variability.



App is also available preloaded on a tablet (offered separately)









Standard Curve Generation and Molarity Calculation: The instrument supports both the use of pre-existing calibration curves and the creation of new two-point calibration curves (*left*). An integrated molarity calculator enables precise determination of dilution factors and final concentrations, facilitating accurate sample preparation for downstream applications (*right*).

Main App Interface and Experiment Run Screen: The Smart-Q Mini app enables users to select the desired experiment type and optionally generate a calibration curve. Once an experiment is defined, users input experimental parameters for both standards and unknown samples, after which the app automatically quantifies sample concentrations with high accuracy and reproducibility.

Accuris Quantification Kits

Compatible with Smart-Q™ Mini and Qubit™

Accuris quantification kits are formulated to deliver highly accurate, sensitive, and reproducible measurement of nucleic acids. They provide a robust alternative to traditional absorbance-based methods. Each kit incorporates optimized fluorescence dye chemistry that selectively binds to DNA, RNA, or ssDNA targets, delivering exceptional sensitivity—even for samples with extremely low or near-negligible concentrations.

Quantification Kit Specifications

DNA

High Sensitivity dsDNA Quantification Kit
Detection range: 0.005–120 ng/µL

Broad Range dsDNA Quantification Kit
Detection range: 0.1 to 1,000 ng/µL

RNA

High Sensitivity RNA Quantification Kit
Detection range: 0.1–100 ng/µL

Broad Range RNA Quantification Kit
Detection range: 1–1,000 ng/µL

ssDNA

ssDNA Quantification Kit
Detection range: 0.05–200 ng/µL



Figure 1: Accuris Standard Quantification Kit



Figure 2: Accuris 1X Quantification Kit

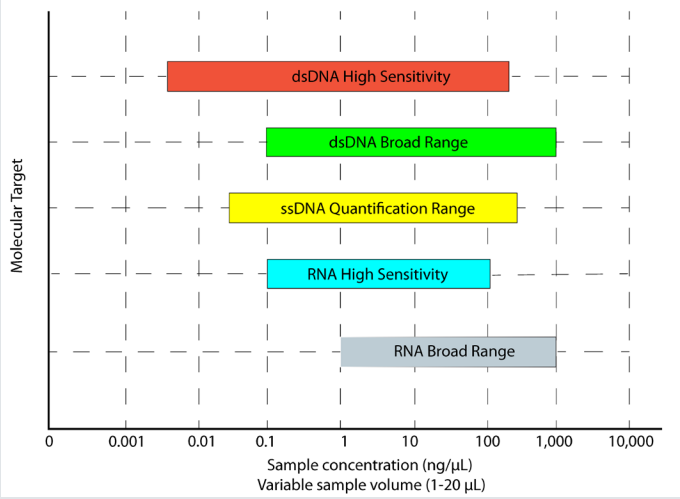


Figure 3: Measurable Concentration Ranges for Accuris Quantification Kits

Figure 1: Accuris Standard Quantification Kit includes a fluorescent binding reagent, buffer, and two calibration standards (standard 1 and standard 2) for generating a precise two-point calibration curve.

Figure 2: Accuris1X Quantification Kit includes a fluorescent working solution, standard 1, and standard 2 for generating a precise two-point calibration curve.

Figure 3: Accuris Quantification Kits cover a broad range of concentrations and are optimized for the selective detection of specific target molecules, ensuring accurate and reliable quantification across diverse sample types.

Specifications:

Model	Smart-Q Mini
Light Source	Blue LED Red LED
Dynamic Range	5 orders of magnitude
Excitation Wavelength	Blue: 470 ± 15 nm Red: 620 ± 20 nm
Emission Wavelength	Green: 525-570 nm Red: 670-725 nm
Repeatability	≤1.5%
Detector	Photodiode, detection wavelength 320-1100 nm
Measuring Speed	≤5 seconds
Calibration	Two-point or midpoint calibration
Sample Tube	0.5 mL optically-clear quantification tubes
Display	No external display (instrument operation via iOS/Android phone or tablet)
Dimensions (W x D x H)	3.27 x 3.27 x 3.62 in. 8.13 x 8.13 x 3.19 cm
Weight	1.1 lb / 0.5 kg



Ordering Information: Smart-Q Mini

Item #	Description
F0100	Smart-Q Mini
F0100-E	Smart-Q Mini, 230 V
F0100-TAB	Android tablet preloaded with Smart-Q Mini App

Ordering Information: Quantification Kits

Item #	Description
F1000-HS	High Sensitivity dsDNA Quantification Kit (available as 100 and 500 assays)
F1000-HS1	1X High Sensitivity dsDNA Quantification Kit (available as 100 and 500 assays)
F1000-BR	Broad Range dsDNA Quantification Kit (available as 100 and 500 assays)
F1000-BR1	1X Broad Range dsDNA Quantification Kit (available as 100 and 500 assays)
F1000-RHS	High Sensitivity RNA Quantification Kit (available as 100 and 500 assays)
F1000-RBR	Broad Range RNA Quantification Kit (available as 100 and 500 assays)
F1000-SD	ssDNA Quantification Kit (available as 100 and 500 assays)
F1001-T	0.5 mL Fluorescent Detection Tubes, pack of 250