

## **DS-11 Series**

# The World's Most Sensitive Microvolume Spectrophotometer



- Full Spectrum UV-Vis
- Integrated Fluorescence
- Powerful Sample QC
- Flexible Export, Wi-Fi, Email, Ethernet, USB







Patent US9442009

## DeNovix DS-11 Series: Confident Quantification

#### 2017 and 2018 Reviewers' Choice Life Science Product of the Year

The DS-11 Series Spectrophotometer/Fluorometer has been recognized as the top rated life science instrument by scientists world-wide. We deliver innovative, easy-to-use, highly precise instruments with customer service that is second-to-none. Our experienced team and technical advisory board includes scientists, engineers and founding members of NanoDrop Technologies, Inc. We stand behind our USA-made products with a two-year factory warranty on DS-11 Series Spectrophotometer / Fluorometers. Search for DeNovix on SelectScience.net to read hundreds of independent product reviews.



## Multiple Models, Unmatched Sensitivity and Widest Dynamic Range

DeNovix offers a choice of models to meet your current and future research needs. Simply select the integrated instrument that includes your desired combination of microvolume absorbance, cuvette absorbance and fluorescence. The DS-11 Series delivers best-in-class detection limits and dynamic range saving analysis time and bench space with instruments that fit your applications.

	DS-11 FX+	DS-11 FX	DS-11+	DS-11	DS-C	QFX
Microvolume	•	•	•	•		
Cuvette	•		•		•	
Fluorescence	•		0	$\circ$	0	

## **Integrated UV-Vis and Fluorescence Modes**

## Microvolume - Rapid 1uL UV-Vis Measurements

DeNovix Spectrophotometers quantify nucleic acids and protein using only 0.5 – 1.0  $\mu$ L of sample. Just pipette and measure - no dilutions necessary. Instant on-screen results include concentration, a full spectrum output, purity ratios and SmartQC<sup>TM</sup> contamination alerts. DeNovix SmartPath® Technology ensures instruments are calibrated for life with no drift or service downtime. Bridge Testing® eliminates broken samples columns and ensures exceptional results, even for 1  $\mu$ L protein samples.

## **Cuvette - Improved Detection Limits and Functionality**

Use standard quartz or disposable cuvettes for up to 10 mm pathlength absorbance measurements (190-840 nm). Cuvette applications include nucleic acids, proteins, colorimetric assays, OD600 and custom standard curves. Systems include a cuvette block heater for Kinetics studies from 37-45°C.

## Fluorometer - Sensitive, Specific Quantitation

The lower detection limit of dsDNA and other biomolecules may be improved 1000x when using fluorescent techniques. Specialized assay chemistries enable highly sensitive and molecule specific quantification, e.g. measuring only dsDNA in samples containing RNA and other contaminants. DeNovix fluorometers can be used with most commonly available fluorescence kits including DeNovix dsDNA Fluorescence Assays and Qubit® Assays.

## Scientist Recommended

f The machine is excellent. I strongly recommend it to others.

Rating: 5.0 ★ ★ ★ ★

followe it, because of the accuracy and convenience.

Rating: 5.0 ★★★★

Best machine in

My lab. 77

Rating: 5.0 \* \* \* \* \*

Try in Your Lab! Free Trial Program

## Software by Life Scientists, for Life Scientists

Built-in EasyApps® make DeNovix instruments easy to learn and quick to use. Our software is ready to use right out of the box. No PC set-up or software installation is required.



Nucleic Acid Quantification dsDNA, RNA, ssDNA



Fluorescence Nucleic Acid Quantification
DeNovix dsDNA, DeNovix RNA, Qubit®, custom assays



**Protein and Peptide Quantification** BSA, IgG, custom proteins



Fluorescence Protein Quantification Commonly used kits and custom assays



Colorimetric Assays Bradford, BCA, Lowry, Pierce 660



**Basic Fluorometer**Pre-configured and user-defined fluorophores



**Kinetic Assays** Fully customizable, 37-45°C



**User Accounts**Password protect data, methods and settings



OD600 Microbial Cell Cultures
Optical density and cell/mL calculations



**Data App**Store and search millions of results

## **Extended Product Line**

#### QFX Fluorometer

Affordable, ultra-sensitive four-channel fluorometer with software pre-installed for commercially popular assays. Includes full network connectivity.



## **DS-C Spectrophotometer**

Cuvette-only instrument for UV-Vis applications (190-840 nm). Intuitive operation, full network connectivity and pre-installed EasyApps for rapid quantification.



### **FX Fluorometer Module**

Add the USB connected FXModule to any DS-11 Series Spectrophotometer to enable all DeNovix Fluorometer apps. Features the same sensitivity and fourchannel flexibility as the DS-11 FX+, DS-11 FX and QFX.



UV (375 nm), Blue (470 nm).

435-485 nm, 514-567 nm,

565-650 nm. 665-740 nm

0.5 mL thin-wall PCR tubes

Green (525 nm), Red (635 nm)

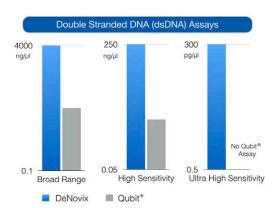
UV (361-389 nm), Blue (442-497 nm),

Green (490-558 nm), Red (613-662 nm)

Photodiode, detection range 300-1000 nm

## **DeNovix Fluorometers and Assays Combine for Unmatched Sensitivity**

DeNovix fluorometers combined with DeNovix assavs outperform equivalent Qubit® kits in both sensitivity and dynamic range. DeNovix offers a full range of dsDNA and RNA kits. Each assay is a simple mix-and-measure, 2-point standard protocol. The breakthrough DeNovix dsDNA Ultra High Sensitivity Assay enables rapid and specific quantification to 0.5 pg/µL dsDNA and the single DeNovix RNA Assay has 1.5 x the dynamic range of both Qubit® assays combined.



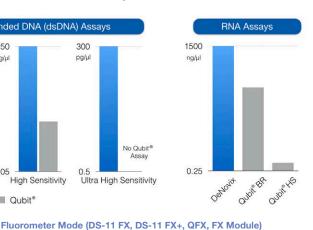
LED Sources

**Excitation Filters** 

**Emission Filters** 

Detectors

Tube Type



#### Spectrophotometer Microvolume Mode (DS-11, DS-11+, DS-11 FX, DS-11 FX+)

0.5 uL Minimum Sample Size

Pathlength 0.5 mm (auto ranging to 0.020 mm)

Light Source Pulsed Xenon flash lamp Detector Type 2048 element CCD Wavelength Range 190 - 840 nm Wavelength Accuracy 0.5 nm

Absorbance Precision 0.015 AU (1 cm) or 1%, whichever is greater Absorbance Accuracy 1.5% at 0.75 AU at 260 nm Spectral Resolution 1.50 FWHM @253.65 nm

Absorbance Range 0.015 - 750A (1 cm) 0.04 mg/mL BSA; 0.75 ng/µL dsDNA **Detection Limit** Maximum Concentration 1125 mg/mL BSA; 37500 ng/µL dsDNA

Measurement Time 2 seconds AutoRun Function Yes

**Power Consumption** 10 W (max 30 W)

SmartQC™ Sample Guidance Contaminant Detection

#### Spectrophotometer Cuvette Mode (DS-11+, DS-11 FX+, DS-C)

Beam height 8.5 mm

Heating 37 - 45°C +/- 0.5°C Pathlength 10, 5, 2, 1, 0.5, 0.2, 0.125 mm 0.002 mg/mL BSA (1cm) **Detection Limit** 0.04 ng/µL dsDNA (1cm) Maximum Concentration 75.0 ng/µL dsDNA (1cm)

Onboard Controller (No PC required) Operating System Custom Android OS

CPU TI OMAP Dual Core ARM Processor Display 1280 X 800 high definition color display Touch Screen Projective capacitive

Gesture Recognition Multipoint touch, swipe, pinch Glove Compatibility All common lab gloves Internal Storage 32 GB flash memory Audio Ruilt-in speaker Wi-Fi, Ethernet, 3 USB ports

Connectivity

Accessories Printer; barcode reader, keyboard, mouse

#### General

2 kg Weight 20 cm X 33 cm Footprint Operating Voltage 12 VDC

Approvals UL/CSA, CE, FCC, Japan CAB

Manufacture Location USA

2 Year Standard Warranty Colors (DS-11 Series)

Arctic White, Brazillian Blue, Fire Red, Tungsten Silver

Patented Design US9442009. Apparatus and Method for Making Optical Measurements of Samples

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