DeNovix®

Absorbance & Fluorescence Combined!

Spectrophotometer / Fluorometer Series

- 1µL and Cuvette Full Spectrum UV-Vis
- Multi-Channel Fluorescence
- Stand-Alone, Compact Design (no PC)
- Intuitive Android™ Interface & Built-in EasyApps®
- Flexible Export to Network, USB, Wi-Fi, LIMS, Print

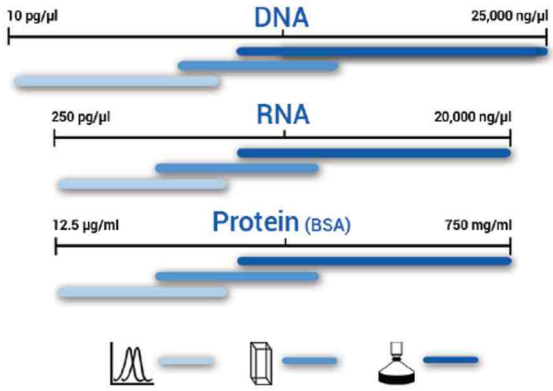
The DS-11 Spectrophotometer & FX Fluorometer Series

Instruments available in any of the four colors shown!

Combined Absorbance and Fluorescence!

The DS-11 FX - A New Standard for Dynamic Range

The DS-11 Spectrophotometer/ Fluorometer (patent pending) gives life scientists the most complete tool ever for rapidly measuring nucleic acid and protein samples. Quantify the widest concentration range of any single instrument by using fluorescence or UV-Vis absorbance methods. Whether you are measuring 10 pg/µL dsDNA samples or 750 mg/mL BSA, the DS-11 Series handles your application.



Model			
DS-11 FX +	✓	✓	✓
DS-11 FX	✓		✓
DS-11 +	✓	✓	
DS-11	✓		
QFX Fluorometer			✓

Microvolume:
0.5 – 1.0 µL samples

Cuvette:
12.5x12.5x8.5 mm z- height standard quartz and disposable cuvette

Flurometer:
0.5 mL thin-wall PCR tube

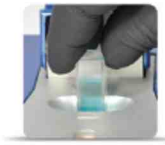
Fluorometer: 0.5 ml thin - walled PCR tube

Fluorometer

Microvolume: 0.5 - 1.0 ml full spectrum UV-Vis

Microvolume

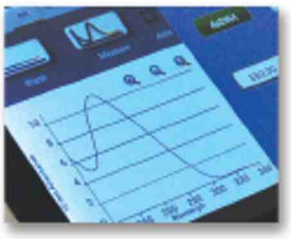
Cuvette: standard quartz and disposable cuvettes, full spectrum UV-Vis



Cuvette

Spectrophotometer Mode

Full Spectrum Analysis

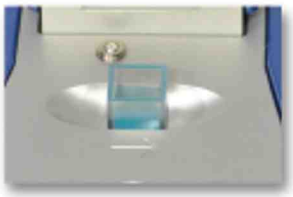


DeNovix UV-Vis Spectrophotometers enable absorbance measurements of 0.5 to 1.0 µL samples. The 190 to 840 nm full spectrum capability makes it an ideal choice for UV-Vis applications like protein and nucleic acid quantification. Just pipette and measure. **It's that simple!**

Microvolume Mode: SmartPath® Technology with BridgeTesting™

The DS-11 is always calibrated - no drift and no service downtime. SmartPath® Technology controls the pathlength in real time ensuring accurate and precise measurements. BridgeTesting™ is our proprietary process to compress and monitor a sample during measurements to ensure the liquid column is intact. This ensures even difficult 1µL samples like proteins are properly measured.

Cuvette Mode: Lower UV-Vis Detection Limits and Added Function



Utilize standard quartz or disposable cuvettes in the DS-11+ or DS-11 FX+ models for up to 10 mm pathlength cuvette based absorbance measurements. Cuvette models also include a built-in cuvette heater and a Kinetics app for temperature controlled studies at 37-45°C.

Fluorometer Mode

Fluorescence Freedom!

DeNovix FX series fluorometers provide assay independence unlike any other. FX units are pre-configured for common commercially available quantification assays. Easily run assays such as Qubit® dsDNA BR, Qubit® dsDNA HS, or Quant-iT™ PicoGreen®. Assay standard curves, including simple two-point methods, are pre-configured. All units also include an unpopulated fourth fluorescent channel that is reserved for future assays or fluorophores.

FX Fluorescence Module - Instant Flexibility

Add fluorescence capability to any DS-11 or DS-11+ Spectrophotometer by utilizing a FX Fluorometer Module. Simply plug this USB accessory into your DeNovix instrument and immediately all fluorometer applications are at your fingertips!

QFX Stand-Alone Fluorometer

The QFX model gives labs that only need fluorescence capability a feature rich solution. Each QFX includes DeNovix Android OS functionality such as Wi-Fi, Ethernet and USB connectivity as well as easy export to printers, LIMS, network drives, etc.

FX Fluorometer Channels

Channel	Excitation	Emission
Blue	470 nm	514-567 nm
Red	635 nm	665-740 nm
Green	525 nm	565-650 nm

Stand-Alone, Intuitive and Easy!

Built-in EasyApps® and our breakthrough Android™ operating system make DeNovix instruments easy to learn and quick to use. Our compact instruments are ready right out of the box - no PC set-up or software installation is required. Make rapid absorbance and fluorescence measurements utilizing application specific apps. Easily build and save your own applications using powerful yet simple custom fluorescence and absorbance method apps.

Glove-compatible 7" HD touchscreen provides a responsive, fluid interface with pinch/zoom/swipe control

EasyApps® Software

DeNovix software was designed by our experienced team of life scientists with each app optimized to streamline your workflow. Absorbance and fluorescence measurement apps for dsDNA, RNA, ssDNA, protein as well as many other quantification and utility apps come pre-installed. DeNovix systems also include Account management, built in e-mail, and free software updates for the life of your DeNovix instrument.

Connect to Your Results

Want data saved to your network drive? Printed in a table? Need to email a color jpeg of overlaid UV-Vis spectra? How about scanning a barcode or printing a cryotube label? Customized field names for your LIMS system? No problem! DeNovix instruments give you all the Wi-Fi, Ethernet, USB and printer export options you need to get your data just where you want it and how you like it.

Free Trial Program ★★★★★

Register denovix.com

Find out why scientists love DeNovix instruments! Evaluate a system in your lab at no charge. Register at denovix.com for your free 7 day trial. DeNovix covers all shipping costs. Trial terms on website.

Specifications

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

Minimum Sample Size	0.5 µL
Pathlength	0.5 mm (auto ranging to 0.030 mm)
Light Source	Pulsed Xenon flash lamp
Detector Type	2048 element CCD
Wavelength Range	190 - 840 nm
Wavelength Accuracy	1 nm
Absorbance Precision	0.002 AU (0.5 mm path) or 1%, whichever is greater
Absorbance Accuracy	2% at 0.75 AU at 260nm
Absorbance Range	0.04 – 500 (1 cm equivalent)
Detection limit	0.10 mg/mL BSA; 2.0 ng/µL dsDNA
Maximum Concentration	750 mg/mL BSA; 25,000 ng/µL dsDNA
Measurement Time	Less than 4 seconds
AutoRun Function	Yes with electromagnetic arm position relay
Operating Power Consumption	10 W (max 30 W)

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

Beam height	8.5 mm
Heating	37 - 45°C +/- 0.5°C
Pathlength	10, 5, 2, 1 mm
Detection Limit	0.10 ng/µL dsDNA (10mm pathlength)
Maximum Concentration	75.0 ng/µL dsDNA (10mm pathlength)

Fluorometer Mode (DS-11 FX, DS-11 FX+, QFX)

Light Sources	Blue LED (~470 nm), Green LED (~525 nm), Red LED (~635 nm)
Excitation Filters	Blue: 442-497 nm, Green: 490-558, Red: 613-662 nm
Emission Filters	Channel 1: 514-567 nm, Channel 2: 565-650 nm, Channel 3: 665-740 nm
Detectors	Photodiode, detection range 300-1000 nm
Tube Type	0.5 mL Real Time thin-wall PCR (polypropylene) tubes

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	8GB flash memory
Audio	Built-in speaker
Connectivity	Wi-Fi, Ethernet, 3 USB ports
Accessories	USB printer; Barcode reader

General

Weight	2 kg
Footprint	20 cm X 33 cm
Operating Voltage	12 VDC
Approvals	UL/CSA, CE, FCC, Japan CAB
Manufacture Location	USA

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Qubit®, Quant-iT™ and PicoGreen® are the property of Thermo Fisher Scientific and its subsidiaries.

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