

## DS-11+ Cuvette Spectrophotometer

Microvolume / Cuvette Spectrophotometer. This easy-to-use, compact instrument delivers full spectrum UV-Vis analysis and is ideal for rapid

nucleic acid and protein quantification.

Rating: Not Rated Yet

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## Description

**The DeNovix DS-11** Microvolume Cuvette Spectrophotometers take spectrophotometry to a whole new level. This easy-to-use, compact instrument delivers full spectrum UV-Vis analysis and is ideal for rapid nucleic acid and protein quantification. Simply pipette and measure. It's that easy!

- **1uL and Cuvette UV-Vis (190-840 nm)**
- **Stand-Alone (no PC required)**
- **Wi-Fi, Ethernet, USB**

**Intuitive and Easy.** DS-11 Spectrophotometers are simple to use and fast to learn thanks to DeNovix EasyApps®. The software is pre-installed on a breakthrough Android™ operating system that features an HD, glove-compatible touchscreen. No PC set-up or software installation is required!

**SmartPath® Technology** is our patent pending design to precisely control microvolume pathlength in real-time. SmartPath® ensures the DS-11 is always in calibration – no drift and no service down-time. Measurements are accurate and precise for 1µL, even for difficult to measure samples like protein.

**DS-11+ Cuvette Mode** enables up to 10mm pathlength measurements using standard quartz or disposable cuvettes extending the UV-Vis lower detectible limit. The built-in cuvette heater controls temperatures for Kinetics studies.

**Connect to Your Results.** Built-in Wi-Fi, Ethernet and USB allows easy export of data you want in the format you need. Email a csv or color jpg of your results...save data to LIMS or network drives...print results or graphs to network and label printers...and more!

The DS-11 and DS-11+ are available in four color choices. The optional FX Fluorescence Module enables any DS-11 to also function as a highly sensitive fluorometer.

## 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 0.03 mm)
Light Source	Pulsed Xenon flash lamp
Detector Type	2048 element CCD
Wavelength Range	190-840 nm
Wavelength Accuracy	0.5 nm
Spectral Resolution	1.5 nm (FWHM at Hg 253.7 nm)
Absorbance Precision	0.002 AU (0.5 mm path), or 1%, whichever is greater
Absorbance Accuracy	2% at 0.75 AU at 260 nm
Absorbance Range	0.0015 – 750 (1 cm equivalent path length)
Detection limit	0.04 mg/ml BSA; 0.75 ng/µl dsDNA
Maximum Concentration	1125 mg/ml BSA; 37500 ng/µl dsDNA
Lower Sample Surface Material of Construction	303 stainless steel and sapphire window
Upper Sample Surface Material of Construction	303 stainless steel and quartz fiber

### 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
Absorbance Range	0.0008-1.5 AU (1 cm path length)
Detection Limit	0.04 ng/µl dsDNA
Maximum Concentration	75 ng/µl dsDNA (1 cm path length)

### Fluorometer Mode (DS-11 FX, DS-11 FX+ and FX Module)

Light Sources	Blue LED (~470 nm), Green LED (~525 nm), Red LED (~635 nm), UV LED (~375 nm)
Excitation Filters	Blue: 442-497 nm, Green: 490-558 nm, Red: 613-662 nm, UV: 361-389 nm
Emission Filters	Channel 1: 514-567 nm, Channel 2: 565-650 nm,

Detectors  
Tube Type

Channel 3: 664-740 nm, Channel 4: 435-485 nm  
Photodiode, detection range 300-1000 nm  
0.5 mL Real Time thin-wall PCR tube (polypropylene)

### Onboard Controller (No PC required)

Operating System  
CPU  
Display  
User Input  
Internal Storage  
Connectivity  
Networking

Custom Android™ OS  
TI OMAP 1.5 GHz Dual Core ARM Processor  
1280 X 800 high definition color display  
Touch screen with swipe and pinch motion; glove compatible  
32GB flash drive  
3 USB ports for printer, barcode reader and USB drive  
Ethernet and Wi-Fi

### General

Colors  
Measurement Time for Spectrophotometry  
Measurement Time for Fluorescence  
Footprint  
Weight  
Operating Voltage  
Operating Power Consumption  
Approvals  
Manufacture Location

Arctic White, Brazilian Blue, Fire Red, Tungsten Silver  
2 seconds  
20 cm X 33 cm  
2 kg  
12 VDC  
10 W; max 30 W  
CE, UL/CSA, FCC and Japan CAB  
USA

## Reviews

14 Scientists have reviewed the DeNovix DS-11 Spectrophotometer.

Average Rating: 4.8

Ease of use - 5 out of 5

After sales service - 5 out of 5

Value for money - 5 out of 5

Nancy H., Rutgers University - DS-11 UV-Vis Spectrophotometer review

"Very easy to use instrument! We tried out the demo for about a week and immediately loved it. The interface is fantastic and great for measuring DNA/RNA/and protein concentrations. Highly recommended for labs that are in need of a spectrophotometer."

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Chris A., Faculty of Medicine and Health Sciences, State Islamic University Jakarta-Indonesia - DS-11 UV-Vis Spectrophotometer review

Application Area: nucleic acid and protein

"We have been trying this tool, and is very satisfied with the ease and practicality. Does not require a PC so spending a space. The appliance is equipped with a large screen and is compatible with android application that enables users to read the results through mobile devices."

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Seth C., NIDDK - DS-11 UV-Vis Spectrophotometer review

Application Area: Measuring nucleotide concentration

"Very easy to use and produces accurate repeatable results! Simple interface that is intuitive."

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Jamie D., US Army Research Laboratory - DS-11 UV-Vis Spectrophotometer review

Application Area: DNA, RNA, and Protein Concentration Analysis

"This product was purchased to replace two older nano analysis machines. This machine is very easy to use, especially with the integrated touch screen pad. The small, compact unit is perfect for a busy, cramped lab. The results are quick and accurate and we have found more uses for that than either of the older nano specs. Great addition to the lab."

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Heidy M., UTRGV - DS-11 UV-Vis Spectrophotometer review

"Not only easy to use but also compact enough to maintain a cluttered free lab."

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Tammy M., UTRGV Biomedicine Brownsville - DS-11 UV-Vis Spectrophotometer review

Application Area: Department of Health and Biomedical Sciences Teaching Labs

"We originally saw the units as a demo for another department and quickly decided to find some money in our budget to purchase, not one but two of the Denovix systems. We love how they work. The touch screen function is so easy to use. We loved the idea of not needing a desktop computer to analyze our samples. We did purchase the printers with it, but have rarely used them. I have found that our students just take pictures of the screen with their smart phones. We also love all the apps that are with the units and the WiFi capabilities. I have already recommended the Denovix spectrophotometer to another lab and they received it about a month ago. We would definitely buy more and recommend them to anyone who is looking into purchasing a spectrophotometer."

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Sara H., University College Cork - DS-11 UV-Vis Spectrophotometer review

"We primarily use this spec for DNA quantification and it works great - it's easy to use, time efficient, and doesn't waste reagents. We had hoped it would be better for bacterial quantification (OD600), but it isn't great for this application. Overall, we like this product very much and would recommend it to other laboratories."

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Kamila C., Medical University of Warsaw - DS-11 UV-Vis Spectrophotometer review

Application Area: Analysis of genomic RNA and DNA

"A very good tool used in our department for screening of RNA and DNA concentrations. It offers a friendly interface, fast results and their reproducibility."

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Karol P., Warszawski Uniwersytet Medyczny - DS-11 UV-Vis Spectrophotometer review

Application Area: Measurements of DNA quantity in CSF samples

"Very good equipment. Easy to handle based on Android system. Measurements are precise and efficient to perform PCR with good results."

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Maria R., CSUF - DS-11 UV-Vis Spectrophotometer review, Jun 2015

"We are using it to measure DNA, RNA and OD. It is very simple to use, the instructions are clear and the platform is very easy to use."

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Josmar R., Universidade de São Paulo - DS-11 UV-Vis Spectrophotometer review

Application Area: Protein and DNA quantification, OD600

"The DS-11+ is everything I expected and more. It is very easy to use, precise, versatile, compact and robust. Before purchasing I read a lot about other equipment and decided to go for DeNovix. I chose it because it seemed to be more well designed and more up to date than the others. Today, I can say with no doubt that it was the best choice. "

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Minerva F., Northern Biologics - DS-11 UV-Vis Spectrophotometer review

Application Area: Using it for protein, DNA and RNA quantitation

"Really easy to use and very accurate. Recommend this product to anyone !!!"

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Xiaojia G., Yale University - DS-11 UV-Vis Spectrophotometer review

Application Area: To measure concentration and quality of everything

"We bought this machine a month ago and everyone in the lab loves it! We use it daily to measure RNA, protein, peptide, antibody, etc... It is very accurate and takes small amount of sample. We can see the absorbance curve for each sample to tell if the sample is in good quality. We get result to our computer digitally through WIFI. Unlike Nanodrop, it offers wide spectra and option of micro-volume or Cuvette measurement."

### Reviews

There are yet no reviews for this product.