

Products


DU® 800 UV/Visible Spectrophotometer
Printer Friendly 
 Related Product Information
 Select

Overview

Product Listing A - Z

Applications
Listing A - Z

Product Catalog


General Research

Clinical Laboratory

Genetic Analysis

Drug Discovery
Research

Immunology

Lab Automation

Disease Management
and Primary Care**Product Overview**

- [Optical Principle](#)
- [Micro-Focused Beam](#)
- [Standard Software](#)
- [Optional Applications](#)
- [Accessories](#)



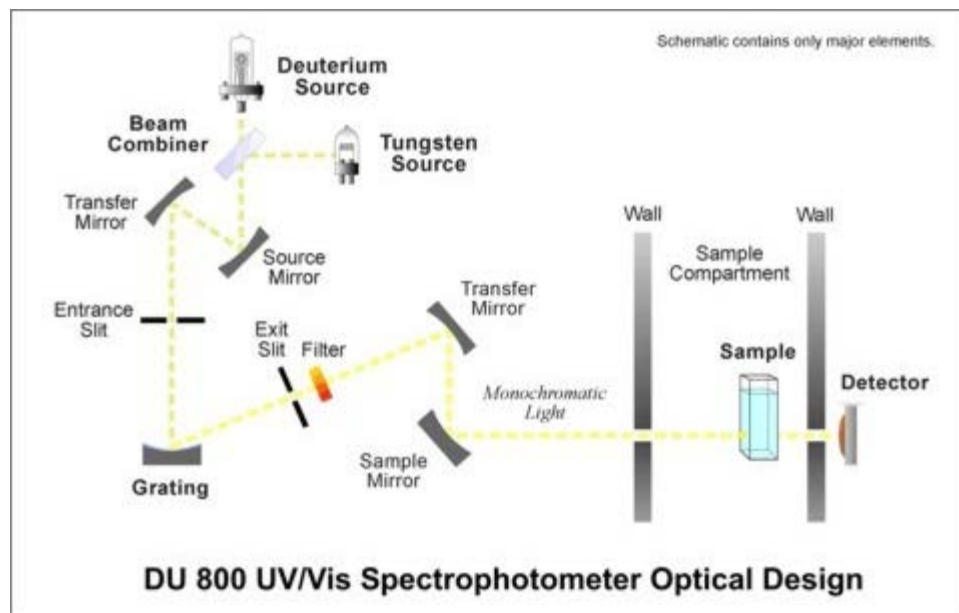
The DU 800 Spectrophotometer is a PC controlled system intended for use in quantitative and qualitative analysis in biological and industrial procedures that require spectrophotometric measurements in the UV and visible region of the electromagnetic spectrum. If the instrument is used in a manner other than as described, the safety and performance of the instrument can be impaired.

The DU 800 Spectrophotometer operates in the wavelength range of 190 to 1100 nm and has a bandwidth of ≤ 1.8 nm. The focused micro-beam design provides a wide linear range and other specific benefits for small volumes and precious samples. Various accessories are available to address micro-volume samples and individual application requirements.

The control of the instrument, data handling, and data reduction capabilities are contained within the confines of the PC. The frame-oriented software provides a convenient and user-friendly interface and, therefore, ensures a quick learning curve. The PC requires Microsoft* Windows 2000 or later as the operating system.

Product Features**Optical Principle**

The DU 800 Spectrophotometer is a single beam instrument. Light from both sources enters the monochromator where it is dispersed by a concave holographic grating. Monochromatic light exits the monochromator and illuminates the sample. The amount of light that passes through the sample is measured by a single photodiode detector.



The focal point of the beam in the sample compartment is on the right-hand side. All sampling accessories position the sample at the focal point for best performance with regular samples and micro-samples.

[❖ back to top](#)

Micro-Focused Beam



The exclusive micro-focused beam of the system delivers the full energy of the beam to your microsample (e.g.; using a 50 uL microcell) to provide highly accurate and reproducible measurements of small and precious samples ... including DNA and proteins. A standard beam can lose as much as 80% of its intensity when applied to a microvolume sample, resulting in a significantly smaller dynamic range and lower sensitivity. Beckman Coulter provides a wide range of unique microvolume accessories, such as single, six, and twelve position cell holders as well as microcells for greatest convenience and performance.

Click on [Microsamples Schematic](#) to view the benefits of the Micro-Focused Beam when used with the appropriate micro cuvettes.

[❖ back to top](#)

Standard Software

The following applications are available with the software installation. More information is available in [System Software](#) and [Standard Applications](#).

Fixed Wavelength - Performs Absorbance or %Transmittance readings for up to 12 wavelengths simultaneously. A factor or custom formula may be applied to calculate final results.

Wavelength Scan - Performs wavelength scans in Absorbance or %Transmittance. Acquired scan data are stored and may be used for various manipulations and calculations. Includes the calculation mode to add, subtract, multiply and divide spectra.

Kinetics/Time - Simultaneously measures and analyses up to 12 rate reactions. Data can be reviewed in real time and automatically calculated and printed. The rate of the kinetic reaction is reported using a linear regression.

Nucleic Acid Analysis - Determines protein impurity in nucleic acid samples based upon the ratio of readings at two wavelengths with a choice of background correction. Protein and nucleic acid concentrations can also be calculated using the Warburg and Christian1 coefficients.

Single Component Analysis - Determines the concentration of unknowns by either

linear or non-linear (quadratic) regression and provides statistical analysis for the standard curve. The standard curve can have up to 30 standards. The operator can re-run any standard, remove or add standards, and have the instrument re-calculate the curve.

Performance Validation - Provides a simple procedure to verify the performance of the instrument without standards or samples. Tests include: wavelength accuracy and repeatability, resolution, baseline flatness, noise, and stability.

In addition, the "rapid" modes **RediRead™** and **RediScan™** are available. These provide the user with a fast and easy way to take readings at fixed wavelengths or to make wavelength scans.

A detailed description of the above applications can be found in Applications Software. Other features, such as User Logon, User Customization, Methods Backup and Transfer, Diagnostics, Source Scheduler, and Performance Validation Scheduler are described in System Software.

The standard software provides all available features to support regulations such as **21 CFR Part 11 Electronic Records; Electronic Signatures**. More information is available on [21 CFR Part 11 Compliance](#).

[❖ back to top](#)

Optional Applications

The following applications can be easily added to the standard configuration via a floppy disk key. More information is available in [Optional Applications](#).

Wavelength Scan II - Extends the functionality of Wavelength Scan with the following modes: Derivatives (1st, 2nd, 3rd, and 4th), NetA Calculations, Scatter Correction, Point Picker, and Peak/Valley Picker. Also included is the display of spectra in LogA.

Nucleic Acid Analysis II - Extends the functionality of Nucleic Acid Analysis with multiple ratios and other concentration calculations. Also included are DNA/RNA Oligo Quantitation modes to determine molecular weight, absorptivity (extinction coefficient), concentration, and the theoretical melting point for oligonucleotide DNA samples.

Protein Analysis - Calculates protein concentrations using the Bradford, Lowry, Biuret, Direct UV, Colloidal Gold, or Bicinchoninate (BCA) methods. The user may choose to add, delete, or re-run individual standards based upon the statistical analysis of the standard curve.

Enzyme Mechanism - Provides for rapid and easy characterization of a wide variety of enzyme reactions. The software calculates and reports Km, Vmax, kcat and Ki as well as the Hill constant. The following functions are available: Michaelis-Menten, Lineweaver-Burk, Eadie-Hofstee, Hanes-Woolf, Hill, and Inhibitor plots.

Enzyme Activity - Calculates the enzyme activity of large numbers of samples from chromatography fractions (endpoint kinetics).

Experimental Tm Analysis - Allows the study of denaturation and renaturation of DNA samples. The thermal melting point (Tm) is determined quickly and efficiently using the First Derivative, 2-Point Average, or a Non-Linear Curve Fit algorithm. Up to six micro-volume samples with 325 µL can be processed automatically, applying up to three temperature ramps.

[❖ back to top](#)

Accessories

A full line of modular accessories is available: ambient and temperature-controlled single and multi-position cell holders, sipper accessory, and batch sampler. Accessories to support micro-volume sampling include microcell holders for up to 12 samples, the 50 µL Microcell, the 100 µL Multi-Microcell, and the 5 µL Ultra-Microcell.



* All trademarks are the property of their respective owners. Where applicable, the PCR process is covered by patents owned by Roche Molecular Systems, Inc., and F. Hoffmann-LaRoche, Ltd.

[❖ back to top](#)

More Info

Additional Information

- [DU 800 UV/Visible Spectrophotometer Specifications](#)
 - [BR-11218A: DU 800 UV/Visible Spectrophotometer Brochure \(PDF Format\)](#)
 - [DU 800 UV/Visible Spectrophotometer Regulatory Documents](#)
 - [DU 800 UV/Visible Spectrophotometer System Requirements](#)
 - [DU 800 UV/Visible Spectrophotometer Parts, Accessories and Ordering Information](#)
-
- [Go to UV/Visible Spectrophotometers Home Page](#)

[❖ back to top](#)

[Home](#) | [Products](#) | [Customer Support](#) | [Resource Center](#)
[Employment](#) | [Our Company](#) | [Contact Us](#) | [Site Map](#)
[Privacy](#) | ©1998 - 2009 Beckman Coulter, Inc.

Products


Printer Friendly 
 Related Product Information
 Select

Overview

Product Listing A - Z

Applications
Listing A - Z

Product Catalog



Clinical Laboratory

Genetic Analysis

Drug Discovery
Research

Immunology

Lab Automation

Disease Management
and Primary Care

The following are "**guaranteed**" and not "typical" specifications, as sometimes claimed by other companies.

Performance Specifications

Wavelength Range	190 to 1100 nm
Wavelength Setability	0.1 nm Increments
Wavelength Accuracy - At 656.1 nm - Full Range	± 0.2 nm ± 0.5 nm
Wavelength Repeatability - At 656.1 nm - Full Range	± 0.1 nm ± 0.2 nm
Spectral Bandwidth (from 200 to 680 nm)	$< = 1.8$ nm
Photometric Readout	-0.300 to 3.000A or 0.0 to 200%T
Photometric Accuracy (at 1A with NIST 930D solid filter at 546 nm)	± 0.005 A
RMS Noise (at 0A, average of 10 standard deviations of 10 readings at 0.05 sec intervals, at 500 nm)	< 0.0002 A RMS
Stray Light (measured using NaI at 220nm, per ASTM E387-84)	$< 0.05\%$ T
Stability (0A, constant ambient conditions, measured for one hour at 340 nm after one hour warmup)	< 0.003 A/hr
RMS Baseline Flatness (from 200 to 900 nm, at 0 A)	± 0.001 A RMS
Scanning Speeds	120, 240, 600, 1200, 2400 nm/min

Physical and Environmental Specifications

Width	69 cm (27 inches)
Height	53 cm (21 inches)
Depth	26 cm (10 inches)
Weight	37 kg (81 pounds)
Line Voltage	110 - 240V $\pm 10\%$
Frequency	50/60 Hz
Power	200 watts typical
Temperature Operating Range	+15 to 40°C (59 to 104°F)
Humidity	$< 85\%$ maximum relative humidity, not to exceed 32.5°C WBT

The physical specifications apply to the optical bench, which is the DU 800 Spectrophotometer without a computer.

[❖ back to top](#)

Additional Information:

- [DU 800 UV/Visible Spectrophotometer](#)
 - [BR-11218A: DU 800 UV/Visible Spectrophotometer Brochure \(PDF Format\)](#)
 - [DU 800 UV/Visible Spectrophotometer Parts, Accessories and Ordering Information](#)
 - [DU 800 UV/Visible Spectrophotometer Regulatory Documents](#)
 - [DU 800 UV/Visible Spectrophotometer System Requirements](#)
-

- [Go to UV/Visible Spectrophotometers Home Page](#)
-

[Home](#) | [Products](#) | [Customer Support](#) | [Resource Center](#)
[Employment](#) | [Our Company](#) | [Contact Us](#) | [Site Map](#)
[Privacy](#) | ©1998 - 2009 Beckman Coulter, Inc.

Products

[Overview](#)[Product Listing A - Z](#)[Applications
Listing A - Z](#)[Product Catalog](#)

General Research

[Clinical Laboratory](#)[Genetic Analysis](#)[Drug Discovery
Research](#)[Immunology](#)[Lab Automation](#)[Disease Management
and Primary Care](#)

DU® 800 UV/Visible Spectrophotometer--System Requirements

Printer Friendly 
 Related Product Information
 Select

[Spectrophotometer](#) | [Computer \(PC\)](#) | [Software](#) | [Power](#)

The DU 800 UV/Visible Spectrophotometer is designed to sit on a laboratory bench or table, which is level, flat and capable of supporting its weight and the weight of all accessories.

The instrument is designed to operate in a clean laboratory environment, free from dust, fumes, excessive moisture, and corrosive chemicals. It should not be exposed to drafts from heating or cooling vents, heating elements, open windows or doors. Lab areas that receive direct sunlight should also be avoided.

An ambient temperature of 15-40°C (59-104°F) should be maintained. Relative humidity should be 85% or less. Instrument performance can be affected by strong electromagnetic fields that can exist in the proximity of large electric motors, centrifuges, diathermy machines, and microwave sources.

Spectrophotometer



The DU 800 includes:

- DU 800 UV/Visible Spectrophotometer (optical bench)
- System and Applications Software CD-ROM
- USB Cable, 6-foot
- PC with pre-installed software, **if ordered**

[back to top](#)

Computer (PC)



A computer (PC) is required to operate the DU 800 Spectrophotometer.

Minimum Requirements:

- Standard PC (266MHz or faster)
- Available USB Port
- 128MB RAM
- 3.5-inch Floppy Drive
- CD-ROM Drive
- *Microsoft Windows 2000/XP (or later)
- Screen Resolution: 800 x 600 pixels

Beckman Coulter fully supports tested PC models, which includes the optional PC that can be ordered from Beckman Coulter. Other PC's that meet the minimum requirements and have the appropriate operating system installed should be compatible. However, this cannot be guaranteed by Beckman Coulter.

The optional PC from Beckman Coulter ensures a ready-to-use system and comes in a fixed configuration, which is subject to change:

- IBM PC with USB interface
- 15-inch Monitor or Flat-Panel Display
- Microsoft Windows 2000 or later (pre-installed)

- DU 800 System and Applications Software (pre-installed)

The pre-installed software is included as an image on CD-ROM, which allows the user to restore the entire content of the hard disk, including the operating system that was included on the hard disk when the system shipped originally.

[↩ back to top](#)

Software



The DU 800 System and Applications Software requires Microsoft Windows 2000/XP (or later) and has been validated with the following local-language Microsoft Windows 2000 Operating Systems:

- U.S. English
- German
- Japanese

The software was written following Microsoft Windows development guidelines and, therefore, should be fully compatible with other Latin and Asian languages.

[↩ back to top](#)

Power

The following optional accessories require a grounded electrical outlet: Printer, Batch Sampler, and Peltier Temperature Controller. The electrical requirements for the PC, monitor, and printer can be found in the respective installation manual of each item.

Electrical Requirements	Frequency (Hz)	Voltage (VAC)	Current(Amps)
Spectrophotometer	50/60	100-240V ±10%	3.0
Batch Sampler (automatically detects proper voltage)	50/60	100-120V ±10% 220-240V ±10%	1.5 0.8
Peltier Temperature Controller	50/60	100-120V ±10% 220-240V ±10%	1.0 0.5

[↩ back to top](#)

* All trademarks are the property of their respective owners. Where applicable, the PCR process is covered by patents owned by Roche Molecular Systems, Inc., and F. Hoffmann-LaRoche, Ltd.

Additional Information:

- [DU 800 UV/Visible Spectrophotometer](#)
- [DU 800 UV/Visible Spectrophotometer Specifications](#)
- [BR-8953B: DU 800 UV/Visible Spectrophotometer Brochure \(PDF Format\)](#)
- [DU 800 UV/Visible Spectrophotometer Regulatory Documents](#)
- [DU 800 UV/Visible Spectrophotometer Parts, Accessories and Ordering Information](#)

- [Go to UV/Visible Spectrophotometers Home Page](#)

[↩ back to top](#)

[Home](#) | [Products](#) | [Customer Support](#) | [Resource Center](#)
[Employment](#) | [Our Company](#) | [Contact Us](#) | [Site Map](#)
[Privacy](#) | ©1998 - 2009 Beckman Coulter, Inc.

Products

[Overview](#)[Product Listing A - Z](#)[Applications Listing A - Z](#)[Product Catalog](#)

General Research

[Clinical Laboratory](#)[Genetic Analysis](#)[Drug Discovery Research](#)[Immunology](#)[Lab Automation](#)[Disease Management and Primary Care](#)

DU® 800 UV/Vis Spectrophotometer Parts, Accessories and Ordering Information

Printer Friendly 
[Related Product Information Select](#)

The DU 800 UV/Visible Spectrophotometer is a scanning instrument with a bandwidth of less than or equal to 1.8 nm and a wavelength range from 190 to 1100 nm.

All instruments include: DU 800 Windows 2000-Based System Control, RediScan™, RediRead™, Wavelength Scan, Fixed Wavelength (up to 12 wavelengths), Kinetics/Time (12 reactions), Single Component Analysis, Nucleic Acid Analysis (Ratios), Performance Validation, Full Support of 21 CFR Part 11 (Electronic Records; Electronic Signature), and Start-Up Diagnostics.

Additional software applications are available and may be added to the system. (See Software Options).

The DU 800 is a customer-installed spectrophotometer and System Installation should be ordered separately (except when service installation is applicable).

DU 800 UV/Vis Spectrophotometers are available with and without PC and Display. When ordered with the Beckman Coulter-supplied PC System, the DU 800 System and Applications Software is pre-installed and the system is ready to use.



PC System Specifications

When the PC is not ordered with the spectrophotometer, it is the responsibility of the customer to furnish a compatible PC with monitor and to supply and install Microsoft* Windows* 2000 as well as the DU 800 System and Applications Software, which is included with the spectrophotometer.

DU 800 Spectrophotometers

The following instrument systems with and without transports (installed) and with and without IBM PC Systems are available.

For Single Sample Analysis

Part No.	Description
512800	DU 800 UV/Vis Spectrophotometer
512802	DU 800 UV/Vis Spectrophotometer with IBM PC and Integrated 15" Flat-Panel Display

[back to top](#)

For Multi-Sample Analysis

Part No.	Description
512804	DU 800 UV/Vis Spectrophotometer with Standard Transport Installed (P/N 517522)
512806	DU 800 UV/Vis Spectrophotometer with Standard Transport Installed (P/N 517522), IBM PC and Integrated 15" Flat-Panel Display

512809	DU 800 UV/Vis Spectrophotometer with High Performance Transport, Installed (P/N 517040)
512808	DU 800 UV/Vis Spectrophotometer with High Performance Transport Installed (P/N 517040), IBM PC and Integrated 15" Flat-Panel Display

[❖ back to top](#)

DU 800 Spectrophotometer Application Packages

All packages come complete with a DU 800 UV/Vis spectrophotometer along with its standard features and software. See the following package descriptions for additional software options, accessories and IBM PC systems included in each.

Part No.	Description
512902	DU® 800 Concentration Package - without IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Single Cell Holder, 4.2 mL UV Silica Cuvette
512903	DU® 800 Concentration Package - with IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Single Cell Holder, 4.2 mL UV Silica Cuvette, and IBM PC with integrated 15" flat-panel display.
512900	DU® 800 Life Science Package - without IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Protein Assay Analysis Software Option, Nucleic Acid Analysis II Software Option, Single Cell Holder, Single Cell Holder for 50 µL Microcell, 50 µL Microcell (Qty. 2).
512901	DU® 800 Life Science Package - with IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Protein Assay Analysis Software Option, Nucleic Acid Analysis II Software Option, Single Cell Holder, Single Cell Holder for 50 µL Microcell, 50 µL Microcell (Qty. 2), and IBM PC with integrated 15" flat-panel display.
512904	DU® 800 Kinetics Package - without IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Enzyme Mechanism Software Option, Protein Assay Analysis Software Option, Standard Transport, Auto 6 Cell Holder (water-regulated).
512905	DU® 800 Kinetics Package - with IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Enzyme Mechanism Software Option, Protein Assay Analysis Software Option, Standard Transport, Auto 6 Cell Holder (water regulated), and IBM PC with integrated 15" flat-panel display.
390391	DU® 800 High-Performance Kinetics Package - without IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Enzyme Mechanism Software Option, Protein Assay Analysis Software Option, High-Performance Transport, Auto 6 Cell Holder (Peltier controlled). NOTE: The appropriate Peltier Temperature Controller is required when temperature control is desired.
390392	DU® 800 High-Performance Kinetics Package - with IBM PC System Includes: DU 800 UV/Vis Spectrophotometer, Enzyme Mechanism Software Option, Protein Assay Analysis Software Option, High-Performance Transport, Auto 6 Cell Holder (Peltier controlled), and IBM PC with integrated 15" flat-panel display. NOTE: The appropriate Peltier Temperature Controller is required when temperature control is desired.
A49423	DU800 Life Science Spectrophotometer and nanoVette package - without IBM PC Includes: DU800 Life Science Spectrophotometer p/n A512900 and nanoVette with 0.2mm pathlength p/n A44097

[❖ back to top](#)

DU 800 Software Options

Part No.	Description
512984	Wavelength Scan II
512980	Nucleic Acid Analysis II
512981	Protein Assay Analysis
512982	Enzyme Mechanism
512983	Enzyme Activity

[❖ back to top](#)

System Installation

Part No.	Description
517042	DU 600/800 System Installation Installation and training on DU 800 by certified Beckman Coulter Service Engineer. Includes training on the basic functionality of the instrument and its applications at the time of installation for a maximum of 4 hours.

[❖ back to top](#)

Experimental Microvolume T_m Analysis Accessory

Experimentally determines the melting point temperature of up to six 325 µL DNA samples with denaturation and renaturation profiles within a temperature range from 0 to 110°C. Includes High Performance Peltier Temperature Controller, Micro Auto 6 T_m Cell Holder, six 325 µL T_m Microcells with Stopper, and the T_m Analysis Software Option.

Requires High-Performance Transport (P/N 517040).

Part No.	Description
390263	Experimental Microvolume T _m Analysis Accessory

[❖ back to top](#)

Replacement Parts for Experimental Microvolume T_m Analysis Accessory

Part No.	Description
523880	325 µL T _m Microcell with Stopper (one cell)
523878	325 µL T _m Microcell with Stopper (package of 6 cells) Included with Experimental Microvolume T _m Analysis Accessory (P/N 390263 and 390264).
517449	Micro Auto 6 T _m Cell Holder Included with Experimental Microvolume T _m Analysis Accessory (P/N 390263 and 390264).
512985	T _m Analysis Software Included with Experimental Microvolume T _m Analysis Accessory (P/N 390263 and 390264).

[❖ back to top](#)

Regulatory & Compliance

For assurance to regulatory agencies that new instrumentation has been certified in your laboratory before generating any test results.

Part No.	Description
512941	DU® 800 Software Validation Pack
512986	DU® Series 800 Certification (OQ 3) For additional coverage to a support agreement or for operational qualification during installation.

[❖ back to top](#)

Data Output Options

Part No.	Description
977510	HP DeskJet Color ink-jet printer (100 to 240V)
970207-01	Parallel Printer Cable, Bi-directional

[❖ back to top](#)

Transports & Temperature Control

Part No.	Description
517522	Standard Transport

	For automatic positioning and movement of samples in DU® 800. Compatible with all ambient & water temperature-regulated accessories.
517040	High-Performance Transport For automatic positioning/movement of samples in DU® 800. Compatible with all ambient and water- or Peltier temperature-regulated accessories.
517057	Peltier Temperature Controller, 120 V For temperature control in the range of 20° to 40°C \pm 0.2°C.
517450	High Performance Peltier Temperature Controller, 120 V For experimental T _m temperature control from 0 to 110°C. Compatible with all Peltier temperature-controlled cell holders.

[↩ back to top](#)

Single Cell Holders

The following accessories are placed on the static mount, provided with the DU 800 Cat. Nos. 512800, 512801, 512802, 512901, 512900, 512903, 512902. They can also be used with a transport (P/N 517040 or 517522).

[Click here for more information on the Turbidity Cell Holder](#) (PDF Format)

Part No.	Description
594439	Single Cell Holder, Unheated. Holds one standard cell, Semi-Microcell (2 or 4 mm pathwidth) with 10 mm pathlength and the 5 μ L Ultra-Microcell or flow cell. Not for use with the 50 μ L Microcell.
523407	Single Cell Holder, Water-regulated temperature control. Includes quick disconnects and tubing for installation to water source. Holds one standard cell, Semi-Microcell (2 or 4 mm pathwidth) with 10 mm pathlength and the 5 μ L Ultra-Microcell, or flow cell.
523403	Single Cell Holder, Peltier temperature control. Holds one standard cell, Semi-Microcell or Flow Cell. Requires Peltier Temperature Controller (P/N 517057 or 517450) and Transport (P/N 517040).
523382	Single Cell Holder for 50 μ L Microcell Unheated, holds a single 50 μ L Microcell assuring proper alignment of the sample and permits easy lifting of the cell from the instrument.
517151	Turbidity Cell Holder, Unheated. For DU® Series 800 to accurately measure cell growth. Holds one standard cell or Semi-Microcell (2 or 4 mm pathwidth) with 10 mm pathlength and the 5 μ L Ultra-Microcell.
517037	Rectangular Cell Holder, Unheated. Holds one cell 5 mm to 50 mm long.
517038	Cylindrical Cell Holder, Unheated.

[↩ back to top](#)

Multi-Position Cell Holders

The following accessories require the transport (P/N 517040 or 517522).

Part No.	Description
523430	Auto 6 Cell Holder, Unheated, includes removable cell basket. Holds up to six standard cells or Semi-Microcells (2 or 4 mm pathwidth) with 10 mm pathlength. Not for use with the 5 μ L Ultra-Microcell or 50 μ L Microcell.
523415	Auto 6 Cell Holder, Water-regulated temperature control. Includes removable cell basket, quick disconnects and tubing for installation to water source. Holds up to six standard cells or Semi-Microcells (2 or 4 mm pathwidth) with 10 mm pathlength. Not for use with the 5 μ L Ultra-Microcell or 50 μ L Microcell.
523409	Auto 6 Cell Holder, Peltier temperature control. Requires Peltier Temperature Controller (P/N 517057 or 517450) and Transport (P/N 517040). Holds up to six standard cells or Semi-Microcells (2 or 4 mm pathwidth) with 10 mm pathlength. Not for use with the 5 μ L Ultra-Microcell or 50 μ L Microcell.
517518	Auto 6 Cell Holder w/ Stirring, 115V

	Water-regulated temperature control and magnetic stirring of all six cuvettes. Includes removable cell basket, quick disconnects and tubing for installation to water source. Holds up to six standard cells or Semi-Microcells (2 or 4 mm pathlength). Not for use with the 5 µL Ultra-Microcell or 50 µL Microcell.
517519	Auto 6 Cell Holder w/ Stirring, 230V Water-regulated temperature control and magnetic stirring of all six cuvettes. Includes removable cell basket, quick disconnects and tubing for installation to water source. Holds up to six standard cells or Semi-Microcells (2 or 4 mm pathlength). Not for use with the 5 µL Ultra-Microcell or 50 µL Microcell.
523386	Micro-Auto 6 Cell Holder Unheated, for six 50 µL cells.
517039	Auto 7 Cell Holder For up to six samples and reference or blank.
517053	Auto 8 Cell Holder For up to six samples and reference and/or blank.
514254	Micro-Auto 12 Cell Holder, Water-regulated temperature control. For up to twelve 100 µL samples. Holds up to three 4-position Multi-Microcells (P/N 514255). Includes quick disconnects and tubing for installation to water source.

[❖ back to top](#)

Sipper and Batch Sampler

Part No.	Description
514242	Sipper Accessory Automated delivery of a sample to a flow cell. Requires desired flow cell, tubing kit and cell holder.
514253	Flow Cell and Tubing Kit Includes 80 µL unheated flow cell (P/N 599925)
514256	Micro-Sipper Cell Accessory Includes 50 µL Aspiratable Microcell (P/N 514758), Tubing Kit (P/N 514282) and retaining clip. Requires cell holder for 50 µL cell (P/N 523382 or P/N 523386). Requires Sipper Accessory (P/N 514242).
512814	Batch Sampler, 115 - 240 V For automated analysis of up to 114 samples. Includes interface and cables. Requires sipper accessory, cell holder, flow cell and tubing kit.

[❖ back to top](#)

Sipper Supplies

Part No.	Description
599925	80 µL Flow Cell, Threaded Fittings, 10 mm Pathlength. For Sipper Sampling Module.
514758	Micro-Sipper Cell, 50 µL Cell replacement for aspiratable Micro-Sipper Accessory.
514745	Sipper/Batch Tubing (Unheated) Three sets of inlet and outlet tubing for unheated sipper (threaded) for Beckman Coulter sampler.
514282	Micro-Sipper Tubing Kit For use with Aspiratable Microcell.
651731	Peristaltic Pump Tubing (quantity 1)
586656	Waste Bottle

[❖ back to top](#)

nanoVette Microliter Measurement Cell

Allows your Beckman Coulter spectrophotometer to work with sample sizes as small as 0.7 µL. Perfect for DNA and Protein applications where small sample size is critical, the nanoVette provides the additional advantage of not requiring dilution of the sample. The same size as a standard

cuvette, installs and removes simply into the DU spectrophotometer and measures dsDNA concentrations up to 5,000 ng/μL.

[Click here for more information on the nanoVette](#)

Part No.	Description
A44097	nanoVette with 0.2 mm pathlength lid
A44098	nanoVette with 1.0 mm pathlength lid
A44100	nanoVette with 0.2 and 1.0 mm pathlength lid
A44102	0.2 mm pathlength lid for nanoVette
A44103	1.0 mm pathlength lid for nanoVette

[❖ back to top](#)

Microcells and Ultra-Microcell

Our unique microcells with their specially designed cell holders enable the user to achieve excellent spectrophotometric precision and accuracy with only 50 μL or just 5 μL of sample. Requires appropriate cell holder (see "Single Cell Holders," earlier).

[Click here for more information on the Ultra-Microcell \(PDF Format\)](#)

Part No.	Description
523270	Microcell, 50 μL (quantity 1)
523450	Microcell, 50 μL (quantity 2)
523451	Microcell, 50 μL (quantity 4)
523452	Microcell, 50 μL (quantity 6)
514261	Ultra-Microcell, 5 μL With tube of 100 quartz capillaries (manufactured by General Atomics) (quantity 1).
514255	Multi-Microcell, 4-Position 100 μL Cell Not available for DU® 640B. Up to three Multi-Microcells (12 samples) can be placed in the Micro-Auto 12 Cell Holder (P/N 514254).

[❖ back to top](#)

Replacement Parts and Supplies

Source Lamps

Part No.	Description
514259	Tungsten-Halogen Lamp
514366	Deuterium Lamp

[❖ back to top](#)

Sampling Cell Supplies

Part No.	Description
594588	Cell Holder Spring Replacement For multi-position cell holders. This spring holds the cells in the cell basket.
590122	Cell Basket, 6 Sample For use with multi-position cell holders having removable cell baskets.
897997	Cell Holder, 1-mm For use with 1 mm cells in a 10 mm cell holder.
514262	Replacement Quartz Capillaries Tube of 100 quartz capillaries for Ultra-Microcell.
517456	Replacement Seals for Tm Cell Holder (package of 6 seals)

[❖ back to top](#)

Performance Validation

Part No.	Description
517698	Holmium Oxide Filter

[✦ back to top](#)

Manuals and Other

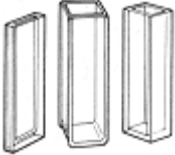
Part No.	Description
390460	DU® 800 System and Applications Software (CD-ROM) Included with instrument.
512860	DU® 800 Installation and Operating Instructions Included with instrument.

[✦ back to top](#)


Cuvettes and Cells

Beckman Coulter provides a wide variety of cuvettes and flow cells for use on the DU® Series Spectrophotometers. Please refer to the charts below for part numbers.


Rectangular, Open Top

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
580011	5	2.1	0.25	10	UV Silica	1	
886506	10	4.2	0.5	10	Optical Gla	1	
75152	10	4.2	0.5	10	Optical Gla	4	
596492	10	4.2	0.5	10	Optical Gla	6	
580012	10	4.2	0.5	10	UV Silica	1	
596493	10	4.2	0.5	10	UV Silica	6	
886510	50	22.5	2.5	10	Optical Gla	1	

Rectangular, Stopped

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
580015	10	3.8	0.5	10	UV Silica	1	
596494	10	3.8	0.5	10	UV Silica	6	

Semi-Microcell, Masked


Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
533041	10	1.2	0.150	2.0	UV Silica	2	
533040	10	1.2	0.150	2.0	UV Silica	4	
533043	10	2.0	0.250	4.0+	UV Silica	2	
533042	10	2.0	0.250	4.0+	UV Silica	4	
517056	10	2.0	0.250	4.0+	UV Silica	6	

Semi-Microcell, Stopped


Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell

886562	10	0.8	0.100	2.0	UV Silica	1	
--------	----	-----	-------	-----	-----------	---	--


50 µL Microcell, Masked

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
523270	10	0.1	0.050	2.0	UV Silica	1	
523450	10	0.1	0.050	2.0	UV Silica	2	
523451	10	0.1	0.050	2.0	UV Silica	4	
523452	10	0.1	0.050	2.0	UV Silica	6	


Multi-Microcell, Masked

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
514255	10	0.35	0.100	3.0	UV Silica	1	


5 µL Ultra-Microcell and Replacement Capillaries

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
514261	0.5	0.007	0.005	0.5	UV Silica	1	
514262	0.5	0.007	0.005	0.5	UV Silica	100	


325 µL Tm Microcell, ** Stopped

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
523880	10	0.445	0.1	3	UV Silica	1	
523878	10	0.445	0.1	3	UV Silica	6	

325 µL Tm Microcell, **

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
517481	10	0.445	0.1	3	UV Silica	1	
517475	10	0.445	0.1	3	UV Silica	6	

Gel Cuvette

Part No.	Path Length (mm)	Total Volume (mL)	Min. Volume* (mL)	Path Width (mm)	Window Material	No. of Cells	Cell
198649	7	--	--	100	UV Silica	1	

* Requires aperture slit of 2 mm height.

** Requires Micro Auto 6 Tm Cell Holder, which is part of the Micro Tm Analysis Accessory.

+ These pathwidths are recommended with six-position auto-transports.

[❖ back to top](#)

Additional Information:

- [DU 800 UV/Visible Spectrophotometer](#)
 - [DU 800 UV/Visible Spectrophotometer Specifications](#)
 - [BR-11218A: DU 800 UV/Visible Spectrophotometer Brochure \(PDF Format\)](#)
 - [A-2041A: Turbidity Cell Holder for DU 800 UV/Vis Spectrophotometer \(PDF Format\)](#)
 - [A-2043A: Measurement of Microvolume DNA Concentrated Samples \(PDF Format\)](#)
 - [DU 800 UV/Visible Spectrophotometer Regulatory Documents](#)
 - [DU 800 UV/Visible Spectrophotometer System Requirements](#)
-

- [Go to UV/Visible Spectrophotometers Home Page](#)

[❖ back to top](#)

[Home](#) | [Products](#) | [Customer Support](#) | [Resource Center](#)
[Employment](#) | [Our Company](#) | [Contact Us](#) | [Site Map](#)
[Privacy](#) | ©1998 - 2009 Beckman Coulter, Inc.